ARMY REGULATIONS, INDIA.

Regulations for the Military Engineer Services.



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PREFACE

This volume of Army Regulations, India, contains the orders of the Government of India on matters concerning the Military Engineer Services The financial powers assigned in this volume are subject to the general financial rules contained in Army Regulations, India, Volume III

Officers are expected to interpret these regulations reasonably and intelligently with due regard to the interests of the service No attempt has been made to provide for matters of detail nor for self evident exceptions Such subsidiary instructions as may be necessary will be framed in accordance with the spirit of these orders and will be issued by the Principal Staff Officer concerned or, in the case of technical instructions, by the Engineer in Chief

The other volumes of regulations with which the M E S are concerned are —

King's Regulations
Pay and Allowance Regulations
Army Regulations, India, Volumes II, III, VII, X, XI
Civil Service Regulations
Army Act and Indian Articles of War
Military Engineer Services Account Code
Barrack Synopsis
Barrack and Hospital Schedules

E BURDON,
Secretary to the Government of India

(NOTE —This book is corrected up to the 15th October 1925)

List showing various orders which will take effect from 1st April 1926.

Para 28 (*b*) and Appendix B	Revised heads shown in the Appendix
Para 29	Rules regarding regrant of lapses
Para 30(*a*), Item 1	Levy of audit charges
Para 33(*a*) and Appendix "C	The limit of Rs 20 000 given in the Appx [illegible] Present (i e , Rs 10 000)
Para 82(*c*)	Rules regarding recovery of *rental* of electric installations etc , in certain cases specified by A I (I) No 942 of 1925 to have effect from 1st April 1926 The existing orders regarding recovery of rental, etc , will continue to apply till 31st March 1926
Para 83(*a*) (*c*) (*d*	(*a*) Depreciation and Renewal Account—Opening of (*b*) Opening a new sub head " Renewals under minor Head ' C ' " Maintenance and operation of Installations ", also the change in the incidence of cost
Para 84(*b* (*ii*)	Follows para 83
Para 86(*d*) (*iii*)	Rate for electricity for power purposes by military consumers Up to 31st March 1926 the existing rate of Rs 0-2 6 will be charged
Para 88(*g*) (*iii*) and Note	*Follows para 83*
Para 89 *g*) (*iii*)	Do
Appendix F	(*a*) *Para 1*(*a*) —Rule regarding capital expenditure on internal wirings and fittings being shown in *A R P M B* (*b*) [illegible] March 1926 (*ii*) Note (*b*) — Do

Appendix G . . . (a) *Para. 1.*—The rule regarding expenditure on house connections follows a similar rule for capital expenditure on internal wirings and fittings of electric installations as given above.

(b) *Para. 2, Clause (iv).*—(i) Note (a).—The existing rule in Appendix to A. I. (I.) 376 of 1925 should be followed till 31st March 1926.

(ii) *Note B.*— Do.

Abbreviations and Definitions

A C R E	Assistant to C R E
A D	Army Department of the G of I
A D M S	Assistant Director of Medical Services of a district
A G	Adjutant General in India A H Q
A G E	Assistant Garrison Engineer
A H Q	Army Headquarters
A I I	Army Instruction India
A I R E M	Assistant Inspector of R E Machinery
A O C	Air Officer Commanding R A F
App	Appendix
A R I	Army Regulations India
B D	Barrack Department of the M E S
B & R	Buildings and Roads branch of the M E S
B T	British Troops
C E	Chief Engineer Command
C F A	Competent Financial Authority
C G S	Chief of the General Staff
C in-C	Commander in Chief
C M A	Controller of Military Accounts Command or District
C R E	Commanding Royal Engineer District
C S R	Civil Service Regulations
D A C M A	Deputy Assistant Controller of Military Accounts
D E & O S	Director of Equipment and Ordnance Stores, A H Q
Dept	Department
Dy C E	Deputy Chief Engineer N W F P
Dy E in C	Deputy Engineer in Chief
D F A	Deputy Financial Adviser
D G I M S	Director General Indian Medical Service
D M S	Director of Medical Services A H Q
D of R	Director of Remounts
D S O	District Stores Officer
E C	Eastern Command
E & M	Electrical and Mechanical branch of the M E S
E in-C	Engineer in Chief
F A	Financial Adviser A H Q
F D (M F)	Finance Department (Military Finance)
F & P	Foreign and Political Department of the G of I
F & S	Furniture and Stores branch of the M E S
G E	Garrison Engineer
G O C in C	General Officer Commanding in Chief Command
G O C Dist	General Officer Commanding district or independent brigade

Govt.	Government.
G. of I.	Government of India.
I. A. S. C. . . .	Indian Army Service Corps.
I. A. O.	India Army Order.
I. A. F.	India Army Form.
I. & L.	Industries and Labour department of the G. of I.
I. M. L. . . .	India Miscellaneous List.
I. S. D.	Indian Stores Department.
I. T.	Indian Troops.
Local M. E. S. Officer .	G. E. or S. D. O.
M. A. G. . . .	Military Accountant General.
M. E. S. . . .	Military Engineer Services.
M. G. S. . . .	Master General of Supply.
M. S.	Military Secretary, A H. Q.
M. T.	Mechanical Transport.
N. C.	Northern Command.
N. C. O. . . .	Non-commissioned officer.
N. W. F. P. . . .	North-West Frontier Province.
O. C.	Officer Commanding.
Para.	Paragraph.
P. S. O.	Principal Staff Officer, A. H. Q.
P. W. D. . . .	Public Works Department.
Q. M. G. . . .	Quartermaster General in India, A. H. Q.
R. A.	Royal Artillery.
R. A. F. . . .	Royal Air Force.
R. E.	Royal Engineers.
R. I. M.	Royal Indian Marine.
R. E. S.	Regulations for R. E. Services, England.
S. B. C.	Standing Barrack Committee.
S. K.	Storekeeper.
S. C.	Southern Command.
S. of S.	Secretary of State for India.
S. D. O.	Subdivisional Officer, M. E. S., or P. W. D
S. O. R. E. . . .	Staff Officer, R. E.
S. O.	Sub-overseer, M. E. S.
T. O.	Technical Officer, M. E. S.
T. I.	Technical Instruction, issued by E.-in-C.
T. & P.	Tools and Plant.
U. A.	Unit Accountant.
U. L.	*Unattached List, Indian Army.*
W. C.	Western Command.
W. O.	Warrant Officer.

TABLE OF CONTENTS.

SECTION I.—ORGANISATION

SECTION II.—M E S PERSONNEL

SECTION III.—WORKS ADMINISTRATION

SECTION IV.—QUARTERS AND RENTS

SECTION V.—BUILDINGS AND ROADS.

SECTION VI.—ELECTRICAL AND MECHANICAL.

SECTION VII.—FURNITURE AND STORES.

APPENDICES.

ARMY REGULATIONS, INDIA.

REGULATIONS FOR THE MILITARY ENGINEER SERVICES.

SECTION I.—ORGANISATION.

1. Scope of Engineer Services —Engineer services comprise —

(a) Buildings and Roads The design, construction, inspection and maintenance of buildings, engineering structures, defences, roads, drains and rifle ranges The sale or demolition of buildings, etc , when so ordered

(c) Furniture and Stores The supply and maintenance of furniture to buildings and the supply of engineer stores, other than those supplied by other departments, also the disposal of surplus articles

(d) Miscellaneous The payment of purchase money or rent for land, buildings and railway sidings The p
taxes and bills for electrical energy
palities, companies, etc Furnishin
Accounts Department to enable that
quarters, furniture and electrical or
collect payments for electrical energy, water, ice or stores supplied

2. Execution of Engineer Services.—(a) The M E S are responsible for the execution of engineer services on behalf of the Army in India, the Royal Air Force, the Royal Indian Marine and all duties connected therewith, except in certain localities where they are under the control of the local P W D

(b) The M E S may undertake work on behalf of any dept of the
Cantonment Authority, of regi-
persons In certain areas,
will carry out all engineer
n

(c) Ordinarily all administrative authorities (military or civil) competent to accord approval to the execution of engineer services have an engineer adviser to assist them in this duty usually the engineer adviser belongs to the engineer service charged with the execution of work When the M E S or the P W D carry out engineer services on behalf of any authority (military or civil) administrative approval

(d) Under ordinary circumstances it is the duty of the M. E. S. to accord equal treatment to the execution of all engineer services entrusted to their charge, whether on behalf of the Army, the R. A. F., the R. I. M., or a dept. of the Army not under the control of the local military commander, or of a civil administration. When, owing to military necessity or other circumstances, (*e.g.*, shortage of personnel, difficulties in obtaining contractors or engineering stores), it is found that such equal treatment cannot be accorded, the question of priority will be referred to the G. O. C. district, who, if he decides that some particular work must be delayed, will inform the administrative head of the service, province, or dept. concerned, stating the probable period of delay and the reasons therefor.

3. **Organisation of the M. E. S.**—The M. E. S. are organised as follows:—

(a) Direction. The E.-in-C. at A. H. Q. is the head of the M. E. S. He is assisted by the following staff:—

Works—a Deputy E.-in-C., a S. O. R. E. 1st grade, a Technical Officer and an Officer Supervisor.

E. & M.—a Deputy E.-in-C. and a Technical Officer.

(b) Administration.

(i) At the headquarters of each Command there is a Chief Engineer, assisted by the following staff:—

Works—a S. O. R. E. 1st grade, a S. O. R. E. 2nd grade (Northern Command only) and a Technical Officer.

E. & M.—a S. O. R. E. (1st grade in Northern Command and Eastern Command; 2nd grade in Southern Command and Western Command).

(ii) For the administration of Military and Civil Works in the N. W. F. Province, there is a Deputy C. E., assisted by a S. O. R. E. 2nd grade. The Deputy C. E. is Secretary P. W. D. to the Chief Commissioner of the N. W. F. Province and for the administration of the M. E. S. in the N. W. F. Province is subordinate to the C. E., Northern Command.

(iii) The C. E., Western Command is Secretary P. W. D. to the A. G. G. for Baluchistan.

(iv) The M. E. S. in the independent districts of Aden and Burma are administered by the C. Es. Southern Command and Eastern Command respectively.

(c) Executive.

(i) At the headquarters of each military district there is a C. R. E. The C. R. E. is graded as 1st class in the districts of Baluchistan, Waziristan, Peshawar, Rawalpindi, Lahore, United Provinces, Presidency, Central Provinces, Poona and Madras: and 2nd class in the districts of Sind-Rajputana, Zhob, Kohat, Delhi, Allahabad, Burma, Bombay and Aden.

(ii) Each C. R. E., 1st class is assisted by an A. C. R. E. In the Waziristan and Peshawar districts a second A. C. R. E. is allowed for Civil works. In the Peshawar, Lahore and United Provinces districts an A. C. R. E. is allowed for E. & M. duties. In the Lahore district an A. C. R. E. is allowed for R. E. Park duties and is in charge of the R. E. Park at Lahore, directly under the C. E., Northern Command.

(iii) Each C. R. E. is further assisted by Garrison Engineers and Assistant Garrison Engineers, a proportion of whom are trained in E. & M. duties. Garrison Engineers are in charge of brigade areas or military stations.

(iv) Officers of the Barrack Department, when posted to districts, are to be employed as District Stores Officers. In other dis-

tricts an officer will be employed as District Stores Officer, the duties of which post will be performed, in addition to other duties

(v) Every G E s charge is divided into a number of sub divisions, each in charge of a S D O (w o or n c o or civilian) Sub divisions are of 3 kinds, viz —

Buildings and Roads

Electrical and Mechanical

Furniture and Stores

S D Os Buildings and Roads are assisted by sub overseers and where necessary a S O may be placed in charge of a *station or area directly under the G E S D Os E & M* control the personnel of installations, workshops etc Furniture and Stores sub-divisions are in charge of members of the Barrack Department who are assisted by storekeepers

(d) The formation of a new M E S district requires the sanction of the G of I or the S of S *vide* A R I, Vol III

district concerned

(f) The total number of sub-divisions in the Furniture and Stores Branch is fixed at 2 ... Barrack Department (exclud ... in each Command is decide ... number allotted are formed

(g) Clerks draftsmen and menials are appointed under the orders of C F A (see paragraph 11) Clerks may be employed as cashiers see paragraph 6 (g)

4 **Relations of M E. S with the staff, etc** —(a) The E in C is not a staff officer he is the technical adviser on all engineering matters to the C in C and the principal staff officers He takes the orders of the G of I and the C in C —

(i) through the C G S on the siting and design of fortifications, defences and strategic roads

(ii) through the A G on the organisation and administration of the M E S

(iii) through the Q M G on the policy and finance of engineer services, other than those referred to in clause (iv)

(iv) through the M G S regarding works required for Ordnance Factories and Military Farms

(b) The E in C will correspond direct with engineer officers on ... upon them to furnish estimates submit proposals or give advice ... t of the provision of accommoda... ments of funds, the E in C is empowered to communicate the decisions of the Q M G and the M G S

(c) *The M E S in every* ... commander of the formation through the Staff The pos... formation is analogous to t... assist his commander, whene... in military engineering

5 **Finance and Accounts** —(a) The F A is the representative of the Finance Department at A H Q and the expert adviser of the C in-C in all matters of military finance One of his deputies acts in

the same capacity as regards M. E. S. In Commands and Districts Cs. M. A. act in a similar capacity to G. Os. C.

(*b*) The M. E. S. are responsible for receipts realised and expenditure incurred by them in connection with engineering services and for furnishing all vouchers connected therewith required by the Military Accounts Department, who are responsible for the compilation of M. E. S. accounts and for auditing all transactions of the M. E. S. The making of payments and the collection of receipts is ordinarily the duty of the Military Accounts Department.

(*c*) Subject to the conditions laid down in A. R. I., Volume III, the E.-in-C. may request the M. A. G. or any C. M. A. to furnish him with such information regarding finance and accounts as may be necessary. A. C. E. or a C. R. E. may similarly request Cs. M. A. with whom he is concerned.

(*d*) Members of the Military Accounts Department posted to M. E. S. offices are under the control of the C. M. A. of the district: they may not be deputed to inspect outstations without his consent.

6. **Duties.**—(*a*) Every officer of the M. E. S. is responsible—

(i) for the efficiency of the M. E. S. under his control;

(ii) for the constructional fitness, accuracy and economy of all designs and estimates prepared by him or submitted by him to higher authority;

(iii) that no departure from regulations, approved general designs and specifications or the orders of superior authority is permitted without the approval of competent authority;

(iv) for the administration of the grants for standing charges placed at his disposal and for advising his commander and such administrative officers as he is appointed to advise regarding the administration of grants at their disposal;

(v) for bringing promptly to the notice of the administrative officer concerned and of superior engineer authority any important defects, serious accidents, unusual occurrences, serious departures from regulations or orders, the probability of excesses over estimates or allotments, or the insufficiency of grants or allotments;

(vi) for carrying out such inspections as may be ordered or as may be necessary.

(*b*) Every executive officer of the M. E. S. (C. R. E., G. E., S. D. O.) is responsible—

(i) for the maintenance in an efficient condition of all Government property in his charge;

(ii) for the prompt, efficient and economical execution of all engineer services;

(iii) for the safe custody of cash: also stocks of engineering stores, furniture, etc., and that they are duly verified according to the rules laid down and that unnecessary accumulations are not permitted;

(iv) that excesses over grants, allotments and estimates are not permitted and that revised estimates are submitted, when necessary;

(v) that in the making of contracts or in the placing of orders, the interests of Government are safeguarded, and that the rates for work are kept down to a minimum;

(vi) for the prompt investigation, and report to superior authority if necessary, of all losses, claims, etc.;

(vii) that all payments for labour, materials or work done are made promptly;

(viii) for the regular posting, preparation, accuracy and punctual submission in a complete form of such accounts as he is responsible for;

(ix) for the up to-date compilation and submission of all records that he is ordered to maintain,

(x) for keeping an official notebook wherein will be entered all orders received and given This book is to be invariably carried on occasions of inspection by superior officers

(c) M E S Officers who have been trained in E & M duties are

ndepen
cted by

he C E

In every case E and M officers will act in an advisory capacity in egard to the following services —

(i) The supervision of all new E and M work

(ii) The examination and when so ordered, the preparation of schemes estimates and specifications for E and M work

(iii) Questions regarding the administration of E and M personnel

(iv) Inspection of E and M plant so as to ensure that the plant is in good order, that the regulation tests for boilers, machinery, etc, are carried out and that proper records are kept

(v) Examination of the working costs of E and M installations and recommendations with a view to improving their efficiency and economy

(d) The S D O Buildings and Roads is responsible for the good quality and prompt execution of all engineer services in his charge
rolls of labour and accounts
alled upon to perform duties
and M or Furniture and

(e) The S
installations,
connected the
ordinarily ass
those of a cashier

(h) Sub overseers are ordinarily assistants to S D Os and will perform such duties as may be assigned to them only in exceptional cases and when so ordered by the C R E or G E can they be placed directly under a G E

(i) A storekeeper is a stockholder and his duties as such are laid down in the *M E S. Account Code* He is responsible to his immediate superior for the custody of all stores in his charge

(j) A list of authorised forms is contained in App K and of prescribed returns in App L

7. Inspections.—(*a*) M. E. S. officers when inspecting out-stations, remount depôts, etc., will notify their military commander, as well as the O. C. station which they are visiting, of their intentions.

8. M. E. S. Officers.—(*a*) The C. E. will fix the rent to be paid for accommodation hired for M. E. S. offices, except in the case of his own office, when the rent will be fixed by the E.-in-C.

(*b*) When an office is located in the house of a M. E. S. officer, the rent payable for office accommodation is limited to half the rent of the whole house, subject to a maximum monthly rent of Rs. 45 in the case of a C. R. E. and Rs. 35 in the case of a G. E.

(*c*) When a sub-divisional office is located in a S. D. O.'s residence, the rent payable for office accommodation is limited to one third of the rent of the whole house, subject to a maximum of Rs. 20.

(*d*) In all cases when rent is paid for offices, a certificate must be attached to the first bill of the year that a suitable public building is not available.

(*e*) The greatest caution should be exercised in ordering the destruction of records. As a general rule all important documents such as leases, land records, contracts, agreements with municipalities, etc., and important correspondence should be preserved in perpetuity and all important documents connected directly or indirectly with accounts or monetary transactions should be preserved for at least 10 years, and should not be destroyed without the concurrence of the C. M. A. As regards other documents the destruction may be carried out under the orders of the C. E. subject to the rules in A. R. I., Volume II.

(*f*) C. R. Es. and M. E. S. authorities superior to them are empowered to sanction charges for hot weather establishments and payments not exceeding Rs. 2 per man per mensem to menials in receipt of monthly rate of pay for supplying water or dusting; also to incur petty charges for the local purchase of stationery to the extent of Rs. 20 for each transaction (G. Es. have similar powers to the extent of Rs. 15).

C. R. Es. of 1st and 2nd Class Districts are empowered to purchase books, newspapers and periodicals to the extent of Rs. 120 and Rs. 50 per annum, respectively.

This does not include such items as Brigade and Station orders, etc., which may be purchased as required.

The E.-in-C. and C. Es. of Commands have full powers in respect of the purchase of books, newspapers and periodicals.

SECTION II —M. E. S. PERSONNEL.

11. Establishment General.—(*a*) The establishments employed in the M E S are divisible into the following categories, viz , Permanent, Temporary and Casual

(*b*) The scales of permanent establishments are sanctioned by the S of S or the G of I (see App A) and are fixed upon the basis of providing only the minimum personnel required for the administration and supervision of all normal engineer services performed by the M E. S , and for the operation of electrical and mechanical installations and workshops

(*c*) Temporary personnel to be employed on duties enumerated in clause (*b*) may be engaged as required, subject to the conditions laid down in para 15, in order to supplement the permanent establishment

(*d*) Casual labour (which may be defined as all labour which does not come under the head permanent or temporary) may be engaged on the basis of monthly or daily payment for the execution of a definite engineer service not performed by a contractor, and, if considered necessary by the C R E , casual personnel may be engaged on a monthly basis for the supervision of such labour Also for the execution of a definite major work or major renewal casual personnel for the supervision of contractor's work may be engaged on a monthly basis by the C R E

persons are em
f the district for
h will be debited

12. Officers —(*a*) The tenure of appointment is 4 years in the case

vacate his appointment on completing 4 years as a regimental Lt Colonel, unless he had elected in 1904 for continuous employment up to the age of 55

(*b*) For the purpose of appointments, posting leave, etc , of officers the districts of Aden and Burma will be administered by the G Os C in C Southern and Eastern Commands respectively

(*c*) Officers of the R E or R E (I A) are posted to the M E S , transferred from the M E S , posted to Commands and transferred between Commands by the M S

(*d*) Departmental officers of the Military Engineering Establishment, or the Barrack Dept and civilian officers are similarly posted or transferred by the A G

(*e*) Except as specified in (*b*) above, officers will be posted within Commands to Command H Q or districts or transferred between districts by G Os C in C commands and G Es and A G Es will be posted within districts to stations or transferred between stations in the district by G Os C districts

(*f*) Privilege leave is granted to officers at Command H Q by the
the G O
and Fur-
) C in C
the case of

(*g*) Provided that the State is put to no expense, an officer of the R. E. or R. E. (I. A.) serving in the M. E. S. may be granted leave in India for 3 months on full pay by the G. O. C. district and by the G. O. C.-in-C. in the case of officers serving at Command Headquarters—

(i) once in his service to pass the prescribed test in Urdu.

(ii) once in each rank to qualify for promotion to higher rank.

Such leave may be taken in instalments and will count in the 33 months' duty required to qualify for accumulated privilege leave.

(*h*) Permanent movements of all officers, including arrival from and departure on leave, are to be reported to the A. G. as soon as possible after the event occurs.

(*i*) The rules for the submission of confidential reports on officers are issued by the M. S. Reports on departmental officers and permanent civilian engineers will be rendered to the A. G. on I. A. F. W-1786 in accordance with the same rules.

(*j*) R. E. subalterns on arrival in India for a first tour of service are attached for a period of 3 months to a Corps of Sappers and Miners under the orders of the M. S. During this period the pay of officers so attached is debited to the M. E. S. grant.

13. **Military Establishments.**—(*a*) Appointments are made by the A. G. from among qualified British N. C. Os. Applications from candidates for admission to the Military Engineering Establishment or the Barrack Dept. will be submitted on I. A. F. U-1740. All S. D. Os. except apprentices for whom a specific period of training before appointment may be prescribed, will be appointed on probation for a year or more.

(*b*) For purposes of regulating military promotion of S. D. Os. (other than of the Barrack Dept.) a combined gradation list of departmental officers, W. and N. C. Os. of the M. E. S., P. W. D., etc., is maintained by the A. G. N. C. Os. are regarded as borne on the list from the date of their permanent appointment to the M. E. S. within the sanctioned scale, and not from the date of their transfer to the I. U. L. N. C. Os. appointed from the Thomason College, Roorkee, are graded in the order in which they pass out, irrespective of the dates on which they may join their appointments. Officers, etc., not in M. E. S. employ are shown in the combined gradation list as seconded and will be promoted *pari passu* with officers, etc., immediately below them.

(*c*) The conditions governing rank promotion are contained in A. R. I., Vol. II, App. XXVII. No N. C. O. will be considered for promotion to W. O. until he is certified by his district commander as in every way eligible for promotion to that rank. No W. O. will be promoted to commissioned rank until he is certified by the G. O. C.-in-C. Command as in every way fit to perform the duties of G. E. or A. G. E. or, in the case of the Barrack Dept., of District Stores Officer.

(*d*) Furlough or leave may be granted by the G. O. C. district, but the concurrence of the G. O. C.-in-C. Command is needed to the grant of furlough. The appointment of a substitute is not admissible. Soldiers holding temporary appointments revert to regimental pay and allowances on ceasing to perform their duties preparatory to proceeding on furlough.

(*e*) W. and N. C. Os. are posted to or transferred between

(i) Commands by A. G.

(ii) Districts by Command H. Q.

(iii) Stations by district H. Q.

All permanent movements and casualties are to be reported to the A. G. as they occur.

(*f*) Confidential reports on W. and N. C. Os. will be rendered on April 1st to the A. G. on I. A. F. W.-1784 in accordance with the general rules issued by the M. S. for confidential reports on officers. The duplicate report will be retained by the C. R. E. and transferred, whenever the W. or N. C. O. is transferred. On return from furlough the

C R E of the district to which the W or N C O is posted on return will obtain the duplicate report from the previous C R E

(g) All members of the Military Engineering Establishment of the M E S and Barrack Dept are entitled to gratuitous medical attendance in accordance with the rules in the Regulations of the Medical Services

14. Civilian Establishments—(a)
S D Os by the A G Postings to
are made under the orders of the A
ments and casualties are to be repor
in a Command and between stations
orders of the C E and C R E respectively

(b) C Es are vested with full powers subject to financial rules to appoint, administer and c
keeper, clerical, drawing
longer be appointed and
out by the C E under the rules contained in C S R

(c) All new entrants, except menials, are required to sign I A F Z 2055

(d) All new entrants will ordinarily be on probation for one year, but the period may be extended to two years or reduced or dispensed with at the discretion of the appointing authority

(e) A sub overseer holding an overseer s certificate from a recognised Engineering Institution may be appointed direct to the 1st grade Provided he is fully qualified in every respect a sub-overseer 1st grade may be promoted to S D O, but the total number of S D Os recruited from this source is not to exceed 12

(f) Lower division clerks, storekeepers and draftsmen and 2nd grade sub overseers are eligible for promotion to the upper division and 1st grade of the respective establishments to which they belong

(g) Menials are eligible for grain compensation allowance which may be sanctioned from time to time by local Govts for their establishments of the same class on the same rates of pay in the same localities

(h) All civilians are subject to C S R, except as provided for in A R I

(i) Leave or furlough may be granted by C R Es subject to such restrictions as may be imposed by C Es and substitutes appointed in accordance with C S R

(j) All civilian members of the M E S (except clerks at Presidency towns, *vide* Regulations of the Medical Services) are entitled to free medical attendance under the conditions laid down in these Regulations

(k) No alterations or additions may be made to the original entries in service books of S D Os without the authority of the A G In the case of new entrants therefore the date of birth must be carefully verified before entry

15 Temporary Personnel—(a) Temporary appointments may be sanctioned up to the following limits of monthly salaries for periods not exceeding two years at a time —

	Rs
by the A G	500
by the C E or Deputy C E	400
by the C R E (1st class)	250
by the C R E (2nd class)	100

on the conditions that funds are available that the pay is limited to the maximum sanctioned for permanent employees of the same grade, and that appointments required by M E S officers for their own offices are sanctioned by the next higher C F A Any appointment on a monthly salary of over Rs 500 requires the sanction of the G of I

(b) All temporary employees are required on appointment to sign I A F Z 2055 but the portions relating to liability for Field Service may be expunged A temporary employee must, however, sign the

complete form, before appointment to the permanent establishment (*vide* para. 14 (*c*)).

(*c*) Temporary personnel are subject to the rules contained in C. S. R. although their pay and allowances, etc., may be charged to works (see para. 17).

(*d*) Once the entertainment of temporary personnel on pay not exceeding Rs. 100 per mensem has been sanctioned by the C. R. E., the G. E. concerned may appoint to, discharge from and grant casual leave in the sanctioned appointment as regards any individual serving under him.

16. Casual Personnel.—(*a*) Casual personnel paid at monthly rates may be engaged for supervision by the authorities mentioned in para. 15 (*a*) subject to the limits specified therein, and to the condition that the engagement is limited to the duration of the work and that funds are available from the allotment for the work.

(*b*) Casual personnel, whether on daily or monthly rates, are not entitled to any pension, or to leave salary or travelling or other allowances, except to the following extent:—

(i) pension or gratuity under certain exceptional conditions specified in C. S. R. or P. & A. Regulations, when admissible, or compensation under the Workmen's Compensation Act (see para. 18).

(ii) single railway fares or the actual necessary cost of travelling, also wages during transit, may be approved by the C. R. E. on joining or in the interest of the work, whereon engaged.

(iii) grain compensation is admissible in accordance with the rule in para. 14 (*g*) to men who are drawing rates of pay which have been fixed with reference to normal circumstances.

(iv) casual leave not exceeding 10 days may be granted by the G. E. on full or reduced pay, provided there is no extra expense to the State.

(*c*) Casual labour which is expected to be employed for more than a month should ordinarily be engaged at monthly rates of pay, but casual labour paid at either daily or monthly rates may be engaged by the G. E. for execution at such rates as are approved by the C. R. E. subject to the limits in para. 15 (*a*). Payment for overtime may be approved by the C. R. E.

17. Incidence of Cost.—(*a*) The pay and allowances of all permanent and temporary personnel will be charged in the first instance to the grant for establishment (but see clauses (*b*), (*c*) and (*d*)). The pay of all casual establishment will be charged direct to the work for which they were engaged.

(*b*) In cases where services are cost-accounted, *viz.*, completed electrical and mechanical installations and workshops, also manufactures; the cost (pay and allowances debited to the establishment grant) of all permanent or temporary personnel, who are employed solely on the execution of such services as apart from general administration or supervision, will be transferred at the end of each month to the estimate of the installation, etc., concerned, being shown under a separate establishment sub-head.

NOTE.—On costs is a percentage on the monthly booked expenditure to cover direction, administration, supervision in the district, and audit (the percentage to be fixed annually by the E.-in-C. in consultation with the M. A. G. and to be intimated to all concerned).

(*c*) In exceptional cases when temporary personnel, or permanent personnel who have been replaced by temporary personnel, are employed solely upon the execution of a major work or major renewal, costing over Rs. 10,000, their pay and allowances debited to the establishment grant may be transferred to the estimate for the work under the orders of the C. R. E. This does not apply to clerical or drawing establishments whose pay and allowances will not be charged to a work, except with the approval of C. E.

(*d*) In the case of minor works, repairs general charges and revenue collection, no portion of the cost of the subordinate supervising establishment permanent or temporary may be transferred to the estimate concerned, except that where the work is carried out by daily

18. Miscellaneous—(*a*) The whole time of every servant of Government is held to be paid for by the State unless otherwise provided for and his pay is his sole legal remuneration The receipt of, or attempt to obtain any commission or consideration, direct or indirect, on account of any Government business, is punishable under the Indian Penal Code

I An exception is made in cases of arbitration as follows —

(i) An officer may not act as arbitrator except with the sanction of his senior officer, or unless appointed by an authorized court

(ii) No officer shall act as arbitrator in a case connected with his executive office

(iii) If he acts by private request he shall accept no fees, except as provided in the C S R

(iv) If appointed by a court of law, he may accept the fees the court fixes

II An officer may accept a prize in a competition for designs

III If appointed by a court to act as a commission to give information on technical engineering points, he may retain such fees as are fixed by the court

(*b*) No member of the M E S shall have a personal pecuniary interest, direct or indirect, in any Government work, or in the manufacture, supply, or sale, of building materials

(*c*) The Workmen s Compensation Act, 1923 applies to the M E S All M E S tradesmen, mechanics and other employees, whether "permanent," "temporary" or "casual," who are paid a monthly wage not exceeding Rs 300, or are employed on manual labour, are to be considered "Workmen" for the purpose of the Act, while employed on works mentioned in Schedule II thereof

SECTION III.—WORKS ADMINISTRATION.

21. M. E. S. Operations.—(*a*) The functions of the M. E. S. are classified as follows:—

Works—

(i) The construction of new engineering works, including the purchase of land, buildings, etc., and the supply of new furniture. Major works are those costing over Rs. 10,000: minor works between Rs. 150 and Rs. 10,000: any work costing under Rs. 150 is treated as a repair, except in the case of furniture and E. & M. installations. All repairs to newly purchased buildings are chargeable to works.

Standing Charges—

(ii) Repairs, renewals and maintenance in good order of all Govt. property in M. E. S. charge except installations.

(iii) The operation and maintenance of M. E. S. electrical and mechanical installations for the supply of electrical energy, water or ice, etc., including payments for water or electrical energy purchased from outside sources and distributed by the M. E. S. (see para. 83 as regards renewals).

NOTE.—In cases (ii) and (iii) any increase in the capital value of a building, etc., due to the execution of renewals will be transferred, on the completion of the work, to the head works, except in the case of lines of Indian Troops which were built regimentally, and have not been reconstructed by the M. E. S.

(iv) Payments when so authorised on account of—

(1) Rents for hired buildings.
(2) Compensation for inferior or deficient accommodation.
(3) Rents for land.
(4) Rent or maintenance of railway sidings and platforms.
(5) Charges connected with the care of vacant buildings.
(6) Other Miscellaneous charges, such as law charges arising on account of disputes connected either with contracts for works, M. E. S., or the leasing of houses under the Cantonments (House Accommodation) Act of 1923.

(v) The payment of all charges in connection with the authorised M. E. S. establishments.

(vi) The provision and maintenance of such tools and plants as are required for the execution of M. E. S. duties.

(vii) Arrangements in connection with the purchase, maintenance and care of engineering stores for general stock, departmental workshops and manufacturing operations, a separate accounts record of which is kept by means of a suspense account.

Receipts—

(viii) The collection, ordinarily through the agency of the Military Accounts Dept., of rents for land, buildings, furniture, etc., and of amounts due for the supply of electrical energy, water or ice, and on account of the sale of Govt. property, in M. E. S. charge.

(*b*) As a standing arrangement the M. E. S. carry out engineer services for the following authorities under separate budget heads for revenue and expenditure:—

(i) The Army generally, under the orders of the C.-in-C. (conveyed through the Q. M. G.), G. Os. C.-in-C. Commands, G. Os. C. Districts and C. F. As. subordinate to them.

(ii) Army Ordnance Factories under the orders of the C.-in-C. (conveyed through the M. G. S.) and Superintendents of Factories.

(iii) The R A F, under the orders of the C in C (conveyed through the A O C) and local Wing Commanders

(iv) The Civil administration in the N W F Province under the orders of the Chief Commissioner

(v) The Civil administration in Baluchistan under the orders of the Agent to the Governor General

(vi) The Civil administrations in Bangalore and Aden under the orders of the Resident concerned

(vii) Civil departments of the Govt of India as regards certain civil works

(c) The M E S may be required to carry out works for the Military Farms Dept, debitable to the budget sub heads for Grass and Dairy Farms under the orders of the G of I and C in C conveyed through the M G S

(d) The M E S may be required to carry out deposit works on behalf of Cantonment Authorities or the Canteen Board and may also do so on behalf of any public body or private person or persons with the prior consent of the G O C district if the cost of the work does not exceed Rs 10 000 and of the G O C in C Command if the cost exceeds Rs 10 000 If the cost exceeds Rs 2 00 000 the prior consent of the C in C must be obtained through the Q M G In the case of work for the Home Govt the prior sanction of the G of I is required

22 **Conditions Governing the Execution of all Work** —(a) No engineer service can be put in hand nor may any liability be incurred in connection therewith, until the following fundamental conditions have been fulfilled —

(i) Approval of the competent administrative authority must have been accorded to its execution at a stated cost

(ii) Technical sanction must have been given to a detailed estimate by competent engineer authority, except as specified in the M E S *Account Code*

(iii) Funds have been allotted to cover the expenditure during the year

Administrative approval is required in the case of new works For standing charges technical sanction covers administrative approval, except as regards temporary establishment (see para 24)

(b) On the ground of urgent military necessity, when reference to C F A would entail dangerous delay, the O C station local O C R A F or Superintendent of Army Factory or any authority superior to them is empowered to order the commencement or continuance of any engineer service, without any of the conditions specified in (a) above having been fulfilled provided that he furnishes an order in writing to the engineer officer concerned and forwards at once a copy of his orders to superior authority, with an explanation of his reasons for giving the orders and an estimate obtained from the engineer officer of the liability incurred A copy of the orders etc, will be sent by the engineer officer to superior engineer authority

(d) Before an engineer service is put in hand in accordance with the rules in this parag
approval technical sar
of the report to highe
to be communicated to
Code) If any of the
fulfilled it is the duty of the engineer officer concerned to obtain their fulfilment as rapidly as possible

(e) If a C M A is of opinion that one (or more) of the conditions prescribed in this paragraph has not been fulfilled, his decision must

be accepted and action taken accordingly. Meanwhile he is empowered to pass charges provisionally, but if undue delay occurs in fulfilling the conditions, he should report the matter to higher administrative authority.

23. Administrative Approval.—(*a*) Administrative approval is defined as the decision of C. F. A. to carry out a particular engineer service at a specified cost. The source from which funds are to be provided must be specified. The estimate of cost, which must embrace all expenditure, to which Government is likely to be committed, must have been accepted in every case by the engineer adviser to the authority concerned. Administrative approval will always be conveyed in the form of a letter. If an approved work is not commenced within 5 years of the date of approval, fresh administrative approval must be obtained. Copies of administrative approval to major works are to be communicated to the E.-in-C. and the C. E. concerned, who are responsible for issuing such technical instructions as may be needed.

(*b*) The powers of administrative approval, in respect of funds which are placed at their disposal, are given to the authorities specified below subject to the conditions stated in this paragraph—(as regards repairs, renewals, etc., see para. 24).

Authority.	For authorised works.	For unauthorised works.
	Rs.	Rs.
A.—G. O. C.-in-C., Command, Q. M. G. in the case of districts or services directly under A. H. Q. (except those under M. G. S. or A. O. C.), M. G. S. and A. O. C. in respect of services under their control.	5,00,000	10,000
B.—G. O. C. district	10,000	2,500
C.—Directors at A. H. Q., D. G., I. M. S., E.-in-C., Director, R. I. M., Commandant, Staff College.	10,000	2,500
D.—G. O. C. or O. C. brigade or brigade area. Wing Commander, commanding a wing or Aircraft depôt.	1,000	500
E.—Supdt. or O. C. of a Remount Depôt, Supply Depôt, Arsenal, Clothing Depôt, Farms Circle, Army Educational Institution, Medical Store Depôt, Heavy and Medium repair workshop, or a station.	200	100
F.—Superintendents of Army Ordnance Factories .	400	200

NOTE.—The above amounts are exclusive of departmental charges.

(*c*) An authorised work is one that has been authorised by Government in the regulations (Barrack Synopsis and Barrack and Hospital Schedules) or by separate orders of general or specific application. In addition, any work that it is customary to provide for troops, etc., *e.g.*, water-supplies, temporary cookhouses in standing camps, etc., may be regarded as authorised.

An unauthorised work is one that does not fall within one of the above categories and may only be approved if exceptional local conditions justify the necessity, or as an important experimental measure, but unauthorised works should not be approved, if the effect of such approval would be to introduce new practice or change of scale.

When according administrative approval to a work, it should be stated whether the work is authorised or unauthorised. If authorised

the authority should be quoted and if unauthorised the reasons for according approval should be specified

(*d*) With a view to guarding against unduly heavy commitments in an ensuing year authorities under A may not accord administrative approval to any new work not included in the budget the cost of which exceeds Rs 2 00 000 without the concurrence of the Finance Department (Military) at A H Q (to be obtained through Q M G in case of G Os C in C Commands)

(*e*) The construction or purchase of officers quarters and messes as well as any increase in capital value due to the execution of any additions and alterations to such buildings or to lady nurses quarters require the approval of Government, except that additions and alterations within the authorised scale of accommodation may be approved by authorities under A up to Rs 1 000 and under B up to Rs 500

Where the general electrification or provision of water supply sanitary installation or drainage to a military station is approved such connections fittings etc as are needed to officers or lady nurses quarters or officers messes within the authorised scales may be considered as authorised and the estimate may be approved by the C F A provided that no special distribution mains are laid to such quarters and messes

(*f*) Additions and alterations to defences are to be regarded as unauthorised works and may only be approved by authorities under A B and D subject to the rules in para 63 and to the condition that in the case of all defences the prior concurrence of the G O C district is obtained

(*g*) The supply of furniture may only be authorised on the condition that no addition to sanctioned scales is involved

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tion

extending beyond 10 years under the orders of authorities at A and B

(*k*) Anticipated or actual savings on an engineer service whether due to the abandonment of a part of a work or to any other cause may not be applied to carry out additional work not contemplated in the approved estimate or which is not definitely contingent on its actual execution without the sanction of the competent authority (see also para 26 (*e*))

24 Technical Sanction—(*a*) Technical sanction (subject to the rules regarding excesses) to detailed estimates for all works or sub ... approval has been accorded ... to estimates for ... ich see para 83) ... within the limits specified —

E in C	Full powers
C E	Rs 5 00 000
Dy C E	Rs 2 00 000
C R E 1st class	Rs 1 00 000
C R E 2nd class	Rs 25 000
G E	Rs 5 000

All sanctions to major works, and to subworks of major works, are to be communicated to the E.-in-C. and to the C. E.

(*b*) Administrative and technical sanction to annual *estimates for* ordinary repairs and the operation and maintenance of installations: to the payment of general charges, where such have been authorised by *regulations or the orders of C. F. A.: administrative and technical* sanction to annual estimates for temporary establishment, subject to the rules governing the entertainment of such establishments, may be accorded by the following M. E. S. officers within the limits specified:—

E.-in-C.	Full powers within then assignments.
C. E.	Full powers within then assignments.
Dy. C. E.	Full powers within then assignments.
C. R. E., 1st class	Full powers within then assignments.
C. R. E., 2nd class	Rs. 25,000.
G. E.	Rs. 5,000 (except for establishment).

(*c*) Administrative and technical sanction to estimates for the purchase, manufacture and repair of tools and plant, subject to the Stores Rules (A. R. I., Vol. III) and para. 23 (*h*), may be accorded by the following M. E. S. officers within the limits specified:—

E.-in-C.	*Full* powers.
C. E.	Rs. 50,000
Dy. C. E.	Rs. 25,000
C. R. E., 1st class	Rs. 10,000
C. R. E., 2nd class	Rs. 2,500
G. E.	Rs. 200

Exceptions.—In respect of the purchase of furniture for offices and inspection bungalows and of tents, these powers are limited as *follows*:—

E.-in-C.	*Full powers.*
C. E.	Rs. 10,000
Dy. C. E.	Rs. 1,000
C. R. E., 1st class	Rs. 500
C. R. E., 2nd class	Rs. 100
G. E.	*nil.*

The purchase of motor cars requires the sanction of the G. of I., of motor cycles the sanction of the E.-in-C., and of other mechanical transport the sanction of the Q. M. G.

(*d*) *Administrative* and technical sanction to estimates for manufacturing operations under the head Suspense, may be accorded by the following M. E. S. officers *within* the limits specified:—

E.-in-C.	Full powers.
C. E.	Full powers.
Dy. C. E.	Full powers.
C. R. E., 1st class	Full powers.

As regards *materials at site* see para. 62.

Note.—Administrative powers in clauses (*a*) to (*d*) are given subject to the observance of financial rules.

(*e*) Acceptance of contracts, subject to the rules regarding *contracts* and to the Stores Rules (A. R. I., Vol. III):—

E.-in-C. and C. E.	Full powers.
Dy. C. E.	Rs. 2,00,000
C. R. E., 1st class	Rs. 1,00,000
C. R. E., 2nd class	Rs. 25,000
G. E.	Rs. 5,000

As regards execution of contracts see Appendix M "The manual for the guidance of officers of the P W D in their relations with contractors" applies also to the M E S

(f) The E in C C E or the Dy C E can order the disposal or

(g) Losses *attendant upon the disposal of stores unavoidable losses* of stock or in connection with manufacturing or building operations and losses due to writing stores down to market rates may be adjusted by the C R E against the estimate concerned or against suspense, provided that a loss is not of such a
when the procedure indicated in A
but the approval of the C E or the I
loss exceeds Rs 25 000 in the case of
in the case of a 2nd class district

(h) If the adjustment of a loss against suspense would unduly inflate the rates for materials, the amount of the loss or any portion thereof may be transferred to the head losses, subject to the following limits —

E in C	Rs 50 000
C E Dy C E	Rs 25 000
C R E, 1st class	Rs 10 000
C R E, 2nd class	Rs 1,000

(i) An officer officiating as E in C, C E or Dy C E will exercise the full powers given above an officer officiating as a C R E 1st or 2nd class will be restricted to the powers of the next lower appointment, subject to such enhancement up to the full powers as may be ordered by the C E The E in C may authorise any officer by
nai ide than the appoint
me authorise any G E
in E, Park to exercise
the of the holder of any
ap ay be reduced by his
immediate superior but in such cases a report must be made to the C E (or the Dy C E) in the case of G Es and to the E in C in the case of C R Es

(j) The above powers when applicable will be exercised by M E S officers in all cases, whether work, etc, is executed on behalf of the Army, R A F, Civil administrations etc, or for deposit works

25 Provision of Funds for Engineer Services—(a) Funds for engineer services are provided in the various budgets of the administrative authorities concerned When engineer services are executed *by the P W D on behalf of the Army, etc, funds are provided under* 50-M E S As regards deposit works see para 35

(b) In the case of works, an allotment for individual major work which has been included in the published budgets, may be taken as authority for incurring expenditure, provided that administrative approval has been accorded and a technical estimate sanctioned Lump sum reserves are provided for unforeseen expenditure on major works and for expenditure on minor works From these reserves allotments may be made to specific works or lump sum amounts for minor works may be placed at the disposal of officers competent to accord administrative approval to the execution of specific works

(c) Grants for repairs and renewals, the operation and maintenance of installations payment of general charges establishment tools and plant and suspense are placed at the disposal of the Q M G, G Os C in C Commands and G Os C districts for distribution to the M E S (but see para 83 as regards renewals to installations)

From these distributed grants allotments will be made to specific estimates or for specific purposes

(*d*) Subject to the provisions of paras. 29 and 83 the Q. M. G., acting on behalf of the C.-in-C., may carry out any re-appropriations whatsoever within the grant for 50 M. E. S. except from the provision for Home expenditure. The M. G. S. and the A. O. C. have similar powers in regard to their budgets. Any transfers between budgets require the sanction of the G. of I.

(*e*) Subject to the provisions of paras. 29 and 83 a G. O. C.-in-C. Command may carry out any re-appropriation within the grant for 50-M. E. S. between the heads of standing charges, between suspense and major works, and between any major works and reserves for major works, except that the approval of the Q. M. G. is required to any re-appropriation from the budget grant, or any allotment made by the Q. M. G. in respect of a work marked class A or a group of works marked category X in the budget, or by the Q. M. G. at any time.

(*f*) A. G. O. C. district or a local Government under its own rules (in respect of Head 50-M. E. S.) may carry out re-appropriations between major works in progress, other than those marked class A or a group marked category X, up to a limit of Rs. 50,000 for each work during the year.

(*g*) The E.-in-C., a C. E. and a C. R. E. have full powers of re-appropriation within the grants placed at their disposal for repairs and renewals, maintenance and operation of installations, general charges, establishment and suspense; the E.-in-C. may re-appropriate between grants to Commands or to independent districts and the C. E. between grants to districts under these heads. The C. R. E. will carry out any re-appropriations from repairs to works in the case of renewals (*vide* para. 21 (*a*) (ii)): from suspense to the subhead losses, when the transfer has been approved by competent authority (see para. 24 (*g*)). Any necessary re-appropriations from Indian to Home expenditure will be carried out under the orders of the E.-in-C.

(*h*) Where a local Government is concerned, their prior concurrence is required to any re-appropriation.

(*i*) All re-appropriations and allotments affecting major works or transfers between main budget heads are to be reported immediately to the Q. M. G.

(*j*) All re-appropriations or allotments, except those from reserves are subject to the condition that a certificate is obtained from the audit officer to the effect that funds are available.

(*k*) If the orders of Government on the budgets under 50-M. E. S. and for the R. A. F. and Ordnance Factories have not been received by the commencement of the financial year, expenditure may be incurred except as regards major works not in progress on all the items and within the amounts provisionally notified by the Q. M. G., M. G. S. or A. O. C. as having been accepted by the C.-in-C.

(*l*) Funds which are not required for the purpose for which granted, or which have otherwise become available, and which are not required to be re-appropriated for other purposes for which they can be made available under rule, are to be surrendered to higher authority at once.

26. Changes and Excesses in Estimates.—(*a*) If, after approval has been accorded to a work, changes or additions are found necessary on account of administrative reasons, they will be referred for orders to the authority, who approved the work. If the work has not been commenced, a fresh estimate should be approved, and if the work has been commenced a supplementary estimate should be approved, *in each case* by the C. F. A., who is competent to accord administrative approval to the entire work (including any additional expenditure involved), who will certify that the supplementary estimate is necessitated by purely administrative reasons.

(*b*) Subject to the conditions that funds are obtained before expenditure of more than Rs. 500 or of Rs. 500 in excess of allotment is incurred, and that the amount of the detailed estimates does not exceed the powers of the authority who approved the work *plus* a 5 per cent. margin, an excess expenditure of 10 per cent. is permissible over the amount of any estimate (including supplementary estimates)

approved by C F A Of this excess not more than 5 per cent may be authorised when sanctioning the detailed estimates Engineer officers should bear in mind that this excess should include an allowance for excesses over estimated rates in any cases in which there is reason to anticipate that contractors may tender at higher rates The balance of the 10 per cent is the limit of the excess that may be incurred over the sanctioned detailed estimate during construction

(c) If the work has not yet commenced and the detailed estimates exceed the amount approved administratively by more than 5 per cent or if they exceed the powers *plus* a 5 per cent margin of the authority who accorded administrative approval then the approval of C F A must be obtained to a fresh estimate and an excess of 10 per cent as explained in clause (b) will be permissible over the amount of this estimate subject to the conditions of that clause

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(e) *In the case of estimates comprising several items of work it is* not necessary to prepare a detailed estimate for all items before commencing work on any one item If the detailed estimate for any of the items exceeds the amount in the approved estimate for that item by more than 5 per cent or if the completion cost of an item exceeds the amount in the approved estimate by more than 10 per cent, the

(f) If any doubt exists as to the fulfilment of these conditions the approving C F A must be afforded an opportunity of reviewing the whole scheme

"7 Demands for Engineer Services—(a) Demands for new works

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as indicated below

(1) If the amount of the estimate lies within his competence the O C station etc will either approve the execution of the work if he can provide the funds from his grant for works or he will order it to be placed on the list of works awaiting execution If the work is unauthorised and beyond his powers but within his powers for authorised works he will obtain the approval of competent authority,
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(e) If the demand is beyond the competence of the O C station,
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unable to make an allotment forthwith, signify his acceptance of the necessity for the demand or otherwise. In the case of works requiring the administrative approval of the G. of I. or S. of S., the necessity or otherwise may be accepted on behalf of the C.-in-C. by the Q. M. G., M. G. S. or A. O. C. as the case may be, but the consent of the G. of I. must be obtained in cases where negotiations with local or other Governments, Indian States, public bodies, companies etc., are involved.

(*d*) The local M. E. S. officer will, on behalf of the O. C. station, local heads of services or departments, maintain a register of the works awaiting execution under the following heads:—

A. List of major works, the necessity for which has been accepted by the G. O. C.-in-C., Q. M. G., M. G. S. or A. O. C.

B. List of minor works within the competence of the O. C. station, etc.

C. List of minor works beyond their competence, the necessity for which has been accepted by competent authority.

Similar registers will be maintained by G. Es. and C. R. Es. on behalf of their commanders or of officers to whom they act as engineer advisers. The C. E. will maintain a register of major works on behalf of the G. O. C.-in-C. and the E.-in-C. a register on behalf of the Q. M. G., M. G. S., and A. O. C. All registers will be reviewed periodically, and items the necessity for which no longer exists will be removed under the orders of the authority who originally accepted them.

(*e*) Directors and heads of services at A. H. Q. and the D. G. I. M. S. will maintain their own registers of minor works, which are beyond the competence of their subordinate officers: when they desire to allot funds they will accord administrative approval or, if beyond their competence in the case of unauthorised works, they will obtain the administrative approval of the C. F. A. concerned.

(*f*) In the case of minor works administrative approval may be accorded to an approximate estimate. In the case of major works administrative approval will be accorded to a plinth area estimate (or abstract estimate, see paragraph 62), or to a detailed estimate, which will be obtained from the C. R. E. concerned by the C. E. or E.-in-C. (through the C. E.), when it has been decided by the G. O. C.-in-C., Q. M. G., M. G. S. or A. O. C. as the case may be, that funds will be provided in the near future.

(*g*) Demands for repairs will be made on the local M. E. S. officer by the O. C. unit, or local head of service or department, but in the case of barracks such demands, unless of an urgent nature, will only be considered at the quarterly barrack inspection (see A. R. I., Volume II).

(*h*) Demands for the provision of accommodation will be submitted to the O. C. station, or local head of service or department, and if there is no Government accommodation available, the M. E. S. will hire the accommodation required under the orders of C. F. A. (but see paragraph 43).

(*i*) Demands other than from officers for the payment of compensation for deficient or inferior quarters, will be submitted through the O. C. unit to the local M. E. S. officer, who will be guided by the regulations on the subject. As regards officers see paragraph 42.

(*j*) The M. E. S. carry out all their duties in accordance with the regulations and the orders of competent authority. Any demand for changes in the regulations, scales of accommodation, etc., is to be referred to the Staff or the administrative authority concerned and not to the M. E. S., who will, however, advise the Staff, etc., regarding the effect and cost of any proposed changes.

28. Budgets for Engineer Services.—(*a*) Budgets for Engineer Services are based upon the schedules of demands which will be prepared as indicated below.

(*b*) For other than new major works the following schedules of demands will be prepared by C R Es under the orders of G Os C of districts —

(i) For the Army, Army Departments, Ordnance Factories, the R A F and Marine in the form shown in Appendix B submitted to the C E Command

(ii) For Imperial Civil Works under the Engineer in Chief in prescribed budget form, submitted to the Engineer in Chief through the C E Command

(iii) For Civil Works executed by the M E S to be included in budgets of the Civil administrations specified in paragraph 21 (*b*) submitted to the Secretary of the local administration concerned in the form required by him

All schedules must [illegible] July The C E will take steps [illegible] administrations for works exec[illegible] ry services Schedules for indepe[illegible] rough the C Es concerned (*i e*, for Aden to C E Southern Command and for Burma to C E, Eastern Command) to the E-in C The schedules for the Simla Imperial Division will be submitted to E in C by the Superintending Engineer

(*c*) *Demands for new major works will be dealt with as follows* —

(i) F[illegible] R A F Ordnance Factories Marine [illegible]

(ii) I[illegible]

Clothing Depots) Form [illegible] the local head of the service or dept concerned in consultation with the C R E of the district and sent through departmental channels to the head of their service or dept by the 25th July The head of the service, etc, after recording his remarks will pass the forms to the E in-C by the 31st August

(iii) Demands for Imperial Civil Works under the E in C will be embodied by C R Es in their schedules of demands

(iv) Demands for works executed on behalf of the civil administrations specified in paragraph 21 (*b*) will be submitted by civil administrative officers, after consulting their engineer advisers, to the Secretaries of the local administrations concerned by July 25th

(*d*) From the schedules of demands received from C R Es and local administrations and from the demands for new major works referred to in sub para (*c*) (i) above the C E will prepare, under the orders of the G O C in C, the Command schedule of demands for other than Civil Works in the form shown in Appendix B and submit it to the E-in C not later than August 31st this date must be strictly adhered to

(*e*) From the schedules, etc, referred to above the E in C will prepare the following schedules of demands by October 1st, in consultation with branches of A H Q concerned —

(i) For 50 M E S submitted to the Q M G

(ii) For 48 Army (Ordnance Factories) submitted to the M G S

unable to make an allotment forthwith, signify his acceptance of the necessity for the demand or otherwise. In the case of works requiring the administrative approval of the G. of I. or S. of S., the necessity or otherwise may be accepted on behalf of the C.-in-C. by the Q. M. G., M. G. S. or A. O. C. as the case may be, but the consent of the G. of I. must be obtained in cases where negotiations with local or other Governments, Indian States, public bodies, companies etc., are involved.

(*d*) The local M. E. S. officer will, on behalf of the O. C. station, local heads of services or departments, maintain a register of the works awaiting execution under the following heads:—

A. List of major works, the necessity for which has been accepted by the G. O. C.-in-C., Q. M. G., M. G. S. or A. O. C.

B. List of minor works within the competence of the O. C. station, etc.

C. List of minor works beyond their competence, the necessity for which has been accepted by competent authority.

Similar registers will be maintained by G. Es. and C. R. Es. on behalf of their commanders or of officers to whom they act as engineer advisers. The C. E. will maintain a register of major works on behalf of the G. O. C.-in-C. and the E.-in-C. a register on behalf of the Q. M. G., M. G. S., and A. O. C. All registers will be reviewed periodically, and items the necessity for which no longer exists will be removed under the orders of the authority who originally accepted them.

(*e*) Directors and heads of services at A. H. Q. and the D. G. I. M. S. will maintain their own registers of minor works, which are beyond the competence of their subordinate officers: when they desire to allot funds they will accord administrative approval or, if beyond their competence in the case of unauthorised works, they will obtain the administrative approval of the C. F. A. concerned.

(*f*) In the case of minor works administrative approval may be accorded to an approximate estimate. In the case of major works administrative approval will be accorded to a plinth area estimate (or abstract estimate, see paragraph 62), or to a detailed estimate, which will be obtained from the C. R. E. concerned by the C. E. or E.-in-C. (through the C. E.), when it has been decided by the G. O. C.-in-C., Q. M. G., M. G. S. or A. O. C. as the case may be, that funds will be provided in the near future.

(*g*) Demands for repairs will be made on the local M. E. S. officer by the O. C. unit, or local head of service or department, but in the case of barracks such demands, unless of an urgent nature, will only be considered at the quarterly barrack inspection (see A. R. I., Volume II).

(*h*) Demands for the provision of accommodation will be submitted to the O. C. station, or local head of service or department, and if there is no Government accommodation available, the M. E. S. will hire the accommodation required under the orders of C. F. A. (but see paragraph 43).

(*i*) Demands other than from officers for the payment of compensation for deficient or inferior quarters, will be submitted through the O. C. unit to the local M. E. S. officer, who will be guided by the regulations on the subject. As regards officers see paragraph 42.

(*j*) The M. E. S. carry out all their duties in accordance with the regulations and the orders of competent authority. Any demand for changes in the regulations, scales of accommodation, etc., is to be referred to the Staff or the administrative authority concerned and not to the M. E. S., who will, however, advise the Staff, etc., regarding the effect and cost of any proposed changes.

28. Budgets for Engineer Services.—(*a*) Budgets for Engineer Services are based upon the schedules of demands which will be prepared as indicated below.

(*b*) For other than new major works the following schedules of demands will be prepared by C R Es under the orders of G Os C of districts —

(i) For the Army, Army Departments Ordnance Factories, the R A F and Marine in the form shown in Appendix B submitted to the C E Command

(ii) For Imperial Civil Works under the Engineer in Chief in prescribed budget form submitted to the Engineer in Chief through the C E Command

(iii) For Civil Works executed by the M E S to be included in budgets of the Civil administrations specified in paragraph 21 (*b*) submitted to the Secretary of the local administration concerned in the form required by him

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the Simla Imperial Division will be submitted to E in C by the Superintending Engineer

(*c*) Demands for new major works will be dealt with as follows —

(i) For services other than R A F Ordnance Factories Marine, Remount Dept and Medical Store Depots (also technical

(ii) I

by the 25th July The head of the service etc after recording his remarks will pass the forms to the E in C by the 31st August

(iii) Demands for Imperial Civil Works under the E in C will be embodied by C R Es in their schedules of demands

(iv) Demands for works executed on behalf of the civil administrations specified in paragraph 21 (*b*) will be submitted by civil administrative officers, after consulting their engineer advisers to the Secretaries of the local administrations concerned by July 25th

(*d*) From the schedules of demands received from C R Es and local administrations and from the demands for new major works referred to in sub para (*c*) (i) above the C E will prepare under the orders of the G O C in C the Command schedule of demands for other than Civil Works in the form shown in Appendix B and submit it to the E in-C not later than August 31st this date must be strictly adhered to

(*e*) From the schedules etc referred to above the E in C will prepare the following schedules of demands by October 1st, in consultation with branches of A H Q concerned —

(i) For 50 M E S submitted to the Q M G

(ii) For 48 Army (Ordnance Factories) submitted to the M G S

(iii) For 48 Army (R. A. F.): submitted to the A. O. C.

(iv) For 41 Civil (Imperial Civil Works under E.-in-C.): submitted to the Dept. of I. and L., through the F. D. (M. F.) and the A. D.

After acceptance by the Commander-in-Chief and by the F. D. (M. F.) the schedules for 50-M. E. S. and 48-Army will be incorporated in the General Estimate for Military Services.

(f) When the general estimates have been passed by Government for 48 Army and 50 M. E. S., the Q. M. G., M. G. S. and A. O. C. will at once communicate the amounts passed to G. O., C.-in-C. of Commands and G. O., C. of independent districts, who will prepare the budgets by districts and submit them to the Q. M. G. by the 15th February (see paragraph 83 as regards renewals of E. and M. installations).

C. Es. will inform local administrations of the amounts passed in respect of works to be executed by them on behalf of the Army, etc. Local administrations will prepare their own budgets and pass them to the C. E. concerned for incorporation in the Command budget.

(g) After the budgets have been checked and concurred in by the M. G. S. and A. O. C., so far as their portions are concerned, the Q. M. G. will submit them to the A. D. for approval through the F. D. (M. F.). After approval by Government the budgets will be issued by the Q. M. G. to all concerned, not later than the 1st April, in anticipation of the A. D. Resolution according formal sanction to the grant for the year.

The budget for 41 Civil (Imperial Civil Works under the E.-in-C.) will be prepared by the E.-in-C. and after approval by the F. D. (M. F.), and Dept. of I. and L., will be issued by him to all concerned.

(h) Budgets for works executed by the M. E. S. on behalf of the civil administrations specified in paragraph 21 (b) will be prepared by the Secretaries to the Governments concerned under their own rules and issued to all concerned, copies being sent to the E.-in-C. and to any C. E. and C. R. E. affected.

29. Budget Control.—(a) Careful budget control is essential in order to ensure that grants are economically spent and that expenditure is spread evenly over the periods during which work is possible. Every effort is to be made to avoid a rush of expenditure at the end of the year.

(b) Before deciding upon the programme of new major works for the year the capacity for expenditure of each district should be considered. Once a new work has been commenced, it should be pushed through to completion as rapidly as possible with due regard to economy. Available funds are to be expended on pushing on works in progress and not on commencing new works. Better results are obtained by concentrating on a small number of works, rather than by dissipating funds over numerous works.

(c) Funds granted for major works are not to be diverted to minor works: the effect of such a course is to slow down major works.

(d) If it can be shown that any funds which have been provided for major works or stock in any year, but cannot be expended for these purposes during the year, are required for the same major works (if in progress) or for stock during the ensuing year, in addition to the normal expenditure that may be anticipated that year, these funds, if definitely surrendered to Government, will be treated as lapses to be regranted and will be included in the ensuing year's budget.

(e) In pursuance of the above principles the following procedure will be followed:—

(i) In the schedules of demands, the requirements for works in progress are to be based upon the current year's grants, subject to such modifications as may have been made by competent authority up to the time of the submission of the schedules, on account of the greater or less speed with which a particular item has been or will, it is anticipated, be executed (owing to quickening or retardation of progress of particular items

having occurred prior to that date or being anticipated subse quent to that date)

(ii) After the submission of the schedule of demands no new non budget major work is to be commenced unless the necessity for it has been accepted by Army Headquarters and unless it can be entirely financed during the current year from reserve for major works If such works are commenced but cannot be completed during the year they must be financed during the ensuing year from reserves for major works and it must be distinctly understood that any amounts to be met from next year s reserve must be definitely ear marked against that reserve

(iii) After the submission of the schedule of demands reappropria tions of funds provided for major works are to be made only between works in progress or from reserves to works in pro gress No re appropriations are to be made from works in progress to reserves

(iv) [illegible]

be needed during the ensuing year and for which provision has not been made in the schedule of demands The reasons for a re grant under suspense must be fully explained It is essential that the utmost care should be taken in framing the statement of probable lapses in each district All amounts entered as lapses to be re granted are thereby automatically surrendered to Army Headquarters so far as the current year is concerned All unallotted reserves for major works are to be surrendered to Army Headquarters at the same time but a demand is to be made for any funds that can be economically spent during the year on new major works accepted by Army Headquarters or works in progress if allotted by January 15th After the submission of these statements no allotments whatsoever are to be made to new major works but reappro- priations may be made between major works in progress All funds surrendered will be taken into the Army Headquarters reserves

(v) A deduct entry representing probable savings will be made [illegible]

current year can be made In determining the funds avail- able it will be necessary to exclude an amount equal [illegible] sum total of the lapses to be re granted

(vi) T [illegible]

will be made to cover unforeseen lapses

(vii) During January the position should be [illegible] ed and on January 2[illegible]th [illegible] are to be reported to Army Headquarters [illegible] any demands for further funds [illegible] major works in progress during [illegible] (At this stage it will be too late to [illegible] in the re-grant of lapses)

(viii) Each G O C District will send [illegible] Command Headquarters [illegible] a statement of actual la[illegible] ing the previous year [illegible] will then be made by A H Q [illegible]

M. F., to the works included in these statements. Similarly a statement should be submitted through the C. M. A. and Command Headquarters to reach A. H. Q. by 15th October showing the actual lapse under suspense. The reason for this lapse should be explained in detail; also the grounds for a re-grant if one is considered necessary. A demand in respect of Home Stores will also be submitted as soon as the carry forward figure has been notified. Any unforeseen lapses not covered by a re-grant (as above) for which provision of funds is obligatory (e.g., Home Stores) must be found from the ordinary Command, etc., reserve for works or by re-appropriation.

(ix) The sum provided to meet re-grants (for works or suspense) is available for no other purpose whatsoever and any balance will be surrendered to Government by October 31st.

30. Departmental Charges.—(a) Whenever services (including supply and repair of furniture) are rendered by the M. E. S. for departments, etc., enumerated below departmental charges will be levied at the rates specified below. No item of expenditure is to be excluded from the levy of departmental charges on the plea that it involved little or no supervision:—

Work performed on behalf of	Establishment charges.	Tools and Plant charges.	Audit charges.
1. Ordnance Factories .	Lump sum payment fixed annually by F. D. M. F. in consultation with M. G. S. or A. O. C. and E.-in-C. on a *pro-rata* basis, taking into consideration administration and direction.	...	1½ %
2. R. A. F.	6 %	1 %	1½ %
3. Grass and Dairy Farms	9 %	1 %	1½ %
4. Civil works for the N. W. F. P. administration.	Actual cost of M. E. S. establishment in the N.-W. F. P. is divided *pro-rata* between Military and Civil works.	1½ %	1½ %
5. Civil works for other local administrations or Govt. Depts., including Civil works under E.-in-C.	21½ %	1½ %	1½ %
6. Works on behalf of the Cantonment authority or the Army Canteen Board.	21½ % G. O. C. district may reduce to 10 % for establishment and T. and P.	1½ %	1½ %
7. H. M.'s Govt., and all deposit works.	21½ %	1½ %	1½ %

NOTE 1.—Special charges have been approved, 3 % for direction and 1 % for audit, in connection with irrigation works in Baluchistan.

NOTE 2.—In the case for estimates prepared by the M. E. S. for works carried out by civil officers a charge of 2 % will be made for the preparation of the estimate.

NOTE 3.—Percentages for work done by workshops and on stock sold are laid down in the M. E. S. Account Code.

(b) In all cases where special establishment or T. and P. have to be employed by the M. E. S., the cost thereof (less the value realised by the sale of T and P. on the completion of the work) will be charged

to the work in addition to the charges specified above Charges on account of establishment and T and P will be levied on the net cost i e exclusive of special establishment and T and P Audit charges will be levied on the total cost

(c) In special cases the E in C with the concurrence of the F D, M F, and M A G may reduce or wholly remit departmental charges on a deposit work costing not more than Rs 2 000 All proposals for the reduction or remission of departmental charges are to be submitted through the C M A

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(e) Whenever revenue, which is not credited to the head XXXVIII Revenue is collected by the M E S establishment charges amounting ... ted In the case irrigation works special establish

(f) In the case of connections to private buildings to the M E S water mains departmental charges (including 1½ per cent for audit) will be levied at the rate of 10 per cent except in the case of Bangalore where the rate will be only 5 per cent

(g) When work is executed by the P W D or the Railway Dept on behalf of the Army Ordnance Factories R A F etc the depart- rnment or railway con by State Railway ad artn ental charges will cost of which exceeds the cost of the work to

(h) All recoveries by M E S on account of departmental charges (excluding audit) will be taken as reduction of expenditure from the heads Establishment and Tools and Plant Recoveries on account of audit will be credited to 48—Army by deduction from expenditure

31 **Works for Services, Departments, etc** —(a) In every cantonment or military station the Standing Barrack Committee will decide what areas buildings etc, are allocated to—

(i) The Royal Air Force
(ii) Ordnance Factories
(iii) Military Farms
(iv) Butcheries
(v) Bal eries
(vi) Clothing Factor es—accommodation used for manufacturing purpo es only
(vii) Mechanical Transport Workshops—other than residential ac commodation or that used for central mechanical transport stores

(b) All buildings internal roads etc allocated to the R A F or to Ordnance Factories are in charge of the M E S who are respon sible for constructior ... eer services con nected therewith C ... and in the case of the R A F, of ... is vested in the A O C or M G S

(c) In the case of military Farms the M E S will only be respon

respon ble for t e execut o of t o rer engineering services required

by them, including the maintenance of any buildings, etc., constructed by the M. E. S., but connections to (not distribution from) M. E. S. electrical or water supply installations will be carried out by the M. E. S. The Director of Farms and Assistant Controllers of Grass and Dairy Farms are empowered to call upon the M. E. S. for any advice they require in engineering matters and for approximate estimates. The C. R. E., in consultation with the Assistant Controller of Grass and Dairy Farms concerned, will arrange for an annual inspection of all Farms buildings and for the submission of a report thereon to the M. G. S. by September 1st.

(*d*) All buildings, etc., allocated to Butcheries, Bakeries, Clothing Factories and M. T. Workshops will be in charge of the M. E. S., who will budget for all expenditure connected therewith under 50—M. E. S. As regards rents, see para. 51. Payments on account of maintenance of railway sidings, etc., hire of office buildings, and any other similar recurring charges will be met from funds to be provided under 48—Army.

(*e*) All transfers of buildings, etc., between departments of the Army and the R. A. F. require the sanction of the G. of I. and will be free of charge. When any buildings, etc., are no longer required for the execution of duties by any service or dept., they will be disposed of in accordance with the rules contained in para. 37.

(*f*) When carrying out work inside the enclosures of Ordnance Factories or Arsenals, etc., the M. E. S. must comply with the rules laid down for persons admitted into such enclosures.

32. Cantonment Works and Buildings.—(*a*) In accordance with the Cantonments Act, 1924 (Act II of 1894), the G. E. or other M. E. S. *officer in charge of military works in a cantonment* is the "Executive Engineer" of the Cantonment, and where there is a Cantonment Board he as "Executive Engineer" is a nominated member and will attend all meetings of the Board. His duties as "Executive Engineer" are purely advisory.

(*b*) The M. E. S. may be called upon by the Cantonment Authority to execute any works or repairs on behalf of the Cantonment Board in accordance with the rules regarding deposit works (see para. 35) and subject to the payment of departmental charges (see para. 30).

(*c*) All buildings in M. E. S. charge used by the Local Government or the Cantonment Authority or a Civil Department for any purpose will be assessed for rent in accordance with the ordinary rules, and rent will be recovered from the Local Government or the Cantonment Authority or Civil Department in occupation.

33. Civil Works.—The rules regarding the conduct of civil works in the North-West Frontier Province and in Baluchistan are contained in Appendix C. In other cases the rules prescribed by the dept. concerned will be followed. In respect of the budget for civil works under the E.-in-C., the powers of re-appropriation in the rules in Appendix are exercised by the E.-in-C. and may be delegated by him to C. Es.

34. Ecclesiastical Works.—(*a*) Ecclesiastical works comprise churches, cemeteries and all buildings, etc., connected therewith. All matters concerning them are to be dealt with in accordance with the Ecclesiastical Rules issued by the Government of India.

(*b*) The provisions of para. 33 apply to ecclesiastical works.

NOTE.—Chaplains' residences are civil and not ecclesiastical works and are dealt with under the ordinary rules of the P. W. D. Code.

35. Deposit Works.—(*a*) Deposit works are those executed from funds of a public nature (not Govt. funds) or from subscriptions by the public. If a work is to be done partly from Govt. funds and partly by subscription, the latter will be treated as an addition to the Govt. grant and the work will be executed under the usual rules.

(*b*) Before any liability is incurred funds to meet in full the estimated cost of the work and the departmental charges must be paid into the treasury, unless payment by instalments is authorised by the G. of I. If during the progress of a work, it is found that further

funds will be needed these must be deposited before expenditure is incurred in excess of the amount already in deposit No interest will be allowed on amounts deposited and no advance of Government funds will be permitted nor will Govt be responsible for any expense or loss due to stoppage of work pending the receipt of further instalments

(c) The design and estimate will be prepared in the usual manner and technically sanctioned by competent M E S authority Before the work is put in hand the written approval and agreement to the conditions of clause (b) must be obtained from the authority for whom the work is to be executed together with an acknowledgment that the M E S are not responsible for unavoidable or reasonable delays or for excesses due to unforeseen contingencies or alterations in design

(d) It is the duty of the M E S officer in charge of the work to keep the authority concerned informed of the progress of the work and of any excess or saving anticipated

36 Reappropriation of Buildings—(a) The reappropriation of a building for an authorised purpose may be approved by the authorities under A to F (para 23 (b)) If the purpose is unauthorised the approval of the authorities under A B or C is required In either case any expenditure involved will be dealt with as a new work

(b) The reappropriation of officers' quarters and messes for other purposes or the reappropriation of any building for use as an officers' quarter or mess requires the approval of the G of I

37 Disposal of Buildings—(a) The demolition or sale of any building etc, may be approved by the authorities under A to E (para 23 (b)) provided that the book value does not exceed the limit of their [illegible] nd by the C in C (whose orders [illegible] M G S or A O C) up to [illegible] pproval by the G of I These [illegible] it the transfer of land is not [illegible] on I A F W 1819

(b) The cost of demolition less the disposal value of materials received is to be dealt with as a work Any proceeds from the sale or demolition of buildings etc which are not required to be replaced will be credited to XXXVIII—M E S receipts unless otherwise ordered by Government

(c) Where the estimate for a work includes the demolition of buildings, etc administrative approval of competent authority to the execution of the work may be taken as sufficient authority for the demolition

SECTION IV.—QUARTERS AND RENTS.

41. Free quarters.—The State undertakes the housing of the following persons rent free, except when on leave or when on detached duty and in receipt of a detention or deputation allowance.

All other Govt. servants will pay rent for a building owned or hired by Govt., or a portion thereof, used as quarters. Whenever practicable, quarters should be provided for those entitled to them; if not available suitable accommodation will be hired, if possible, through the agency of the M. E. S. (see paras. 23 (i) and 43).

(*a*) Military officers (including R. A. F.) under the rules in para. 42.

(*b*) Military Secretaries to the Governor-General and Governors of Presidencies.

(*c*) Lady Nurses, Military Assistant Surgeons, Military Medical pupils and Hospital Matrons; also Sub-Assistant Surgeons holding commissioned ranks of Captain and Lieutenant may be provided with free quarters, if required to live in particular quarters in order to be near their work.

(*d*) Regimental and non-departmental W. Os. (including R. A. F.); Army Schoolmistresses who are in receipt of the lower rate of pay; and all British non-commissioned officers and men (other than those on consolidated rates of pay); Military apprentice S. D. Os. of the M. E. S.

(*e*) The recognised families of those mentioned in (*d*) above when the husband is absent on duty in India or furlough (m. c.) out of India.

(*f*) The following civilian employees of Military Departments:—

(i) *Ordnance Department.*—Principal Foremen, Civil Chief Master Armourers; Foremen, Assistant Foremen and officiating and permanent Chargemen and others graded as such, Storeholders and Assistant Storeholders.

(ii) *I. A. S. Corps.*—Permanent hospital Storekeepers (who have not accepted the new conditions of service) and their families when the husbands are on field or foreign service.

(iii) Remount Department overseers.

(iv) Such menial public servants of Military Telegraph Offices located in Govt. buildings, and such servants of persons residing in the office, as the officer in charge may consider it necessary to retain on the premises at night.

(*g*) The families of civilian non-gazetted officers and civilian subordinates of the Ordnance Department when the husband is absent on field service.

(*h*) Indian combatants (including Indian officers not holding honorary or permanent King's Commissions), Indian officers (not holding King's Commissions) employed on supply duties with the I. A. S. Corps.

(*i*) Sub-Assistant Surgeons, I. M. D. (not holding King's Commissions, regarding whom see (*c*) above) and Veterinary Assistant Surgeons of the Army Veterinary Corps; also their families when the husbands are on field or foreign service, or ordered on duty to stations or camps, where the families are not permitted to accompany them.

(*j*) Staff of Lawrence Royal Military School, Sanawar.

(*k*) Those members of the condensing establishments in Aden who enjoyed this concession prior to transfer to the M. E. S.

(*l*) Indian artificers of the Mechanical Transport Service. Indian Hospital Corps at Company headquarters and in all hospitals. Clerical establishment of the Recruiting Staff.

(*m*) Authorised followers of regimental units; of the Ordnance Department; of the I. A. S. Corps who are paid by the State and whose

duties require them to live within the enclosure of depots, transport lines (regimental or departmental) and bakeries

(n) The following classes borne on the establishment of the Royal Indian Military College Dehra Dun —

[illegible] tains or lieutenants of the Army [illegible] n, Serjeant Major, Indian Adju[illegible] teacher drawing and manual training master Ground Superintendent, religious teacher, Indian Mess Caterer and Supervisor

(o) If a person entitled to free quarters has been allotted certain Government quarters and thereafter elects to make his own arrangements, he shall forfeit all claim to such free quarters

42. Rules governing the allotment of free quarters, or the grant of lodging allowance in lieu to Military Officers—The following rules govern the allotment of free quarters or the grant of lodging allowance in lieu, to military officers (including R A F) whose emoluments include lodging allowance as a separate item —

[illegible] *f quarters* Wherever Govt quar[illegible] leased or hired by Govt they will [illegible] rules contained in sub para (h) [illegible] C station to the best advantage, [illegible] of the State and military convenience

(b) *Provision of quarters or grant of lodging allowance in lieu*

(i) Officers (other than those referred to in para 41 (b)) to whom quarters have been allotted of the class to which they are entitled will not receive lodging allowance

(ii) When Govt quarters are not available for an officer he will receive lodging allowance and will make his own arrangements for quarters

(iii) If no Govt quarters are available and an officer is unable to

[illegible]

(c) *Occupation of married or single quarters by married officers*

(i) A married officer whose family is residing with him will be allotted married quarters if available if his family is not residing with him he may claim that single quarters be allotted to him, and he will then be paid the difference between the lodging allowance of a single and a married officer

(ii) If under the above rule a married officer has been allotted [illegible] ed by his family, [illegible] C, station, one [illegible] gements may be [illegible] ers

(iii) If a married officer is allotted married quarters and his family leave him for a period of less than 6 months he will not be entitled to claim single quarters but these may be allotted to him, if no expense or loss to the State is involved

(iv) If a married officer is allotted married quarters and his family leave him for a period of not less than 6 months, he may, on certifying to this effect, claim that single quarters be allotted to him on the departure of his family within one month of the date of his application. If, however, his family rejoin him before the expiry of six months, he will forfeit any amount he has drawn under sub-para. (i) above.

(v) A married officer for whom neither single nor married quarters can be made available will draw the lodging allowance for a married officer, irrespective of whether his family is residing with him or not.

(*d*) *Compensation for Inferior Quarters.*—When accommodation of the class prescribed for his rank is not available for an officer, he may be permitted or required by the O. C. station to occupy such accommodation as may be available. If the accommodation so allotted to him is inferior to that to which he is entitled he will be paid as compensation a proportion of his lodging allowance based upon the inferiority of the quarters occupied, *e.g.*, if he is entitled to 5 units and is allotted only 4 he will be paid one-fifth of the lodging allowance of his rank.

NOTE.—Compensation is not admissible in the following cases:—

I. If occupying the accommodation authorised in the Barrack Synopsis.

II. If in the opinion of the Brigade Commander or O. C. station an officer is suitably housed, irrespective of the scale of accommodation laid down.

III. If an officer wishes to occupy or to continue in occupation of inferior quarters, although quarters of the class to which he is entitled are available, he may do so, with the consent of the O. C., station, but will not draw compensation.

(*e*) *Lodging allowance admissible during moves.*

(i) An officer not provided with quarters by the State for whom suitable quarters become available, a married officer moving from single to married quarters and *vice versâ*, and an unmarried field officer moving into quarters appropriate to his rank, will be allowed a period not exceeding 10 days for moving into the quarters allotted to him; during this period he will continue to be paid such compensation or lodging allowance as he may have been drawing.

(ii) An officer transferred from one station to another will be paid lodging allowance for the period of transit subject to a maximum of 10 days.

(*f*) *Frontier Stations and Schools of Instruction.*

(i) In places such as frontier posts, forts, schools of instruction, etc., where the normal accommodation for a single junior officer is assessed at half a unit (*vide* sub-para. (*h*) below) and for single senior officers at two or three half units, an officer will be paid compensation, *e.g.*, an officer allotted half the authorised accommodation will draw half his lodging allowance.

(ii) Officers situated in the circumstances mentioned in (i) above will not be compelled to occupy more accommodation than the normal allotment, even though such accommodation may be available.

(*g*) *Claims.*—Claims for lodging allowance or compensation for inferior accommodation will be submitted in accordance with rule.

(*h*) (i) All houses which may be built, acquired, leased or hired for occupation by officers will be classified by the Standing Barrack Committee, subject to approval by the G. O. C. Dist., in accordance with the following rules.

(ii) Every house will be considered as containing a certain number of units, the unit *being a main room containing approximately*—

200 square feet in the hills or semi hill stations

250 square feet in the plains

Any main room containing less than ⅔ of the above accommodation ... Halls, passages dressing rooms, bath ... ah rooms will not be taken into con ... to the portion of the G O C's resi-

(iii) On the unit basis defined above every house will be classified as suitable for one or more officers of specified ranks, as follows —

(1) Single Junior officer up to and including all Captains	One unit
(2) Single Senior officers, Majors and upwards	Two units
(3) Married Junior officers up to and including all Captains—	
if in a hostel	Two units
if in a house	Four units
(4) Married Majors—	
if in a hostel	Two units
if in a house	Five units
(5) Married Lieutenant Colonels or Colonels—	
if in a hostel	Three units
if in a house	Six units
(6) Colonel Commandant Colonel on the Staff or Major General single or married	Seven units

(iv) A single officer not provided with mess accommodation is entitled to an additional unit

(i) Tents occupied by an officer in his permanent station will not be classified as quarters If the tents are provided by Govt , the officer will pay the hire of the same and draw the lodging allowance to which he is entitled

(j) As regards rent and charges for furniture, electricity and water, see para 47 (n)

43. Appropriation and hiring of houses for Military Officers—(*a*) Accommodation required for officers (including R A F) entitled to free quarters or lodging allowance in lieu, may be hired by the local M E S officer concerned under the orders of the G O C District provided that suitable quarters owned or hired by Govt are not available (but see exceptions mentioned in para 42 (*b*) (iii)) In such cases endeavours should be made to adhere, as closely as possible, to the authorised scales of accommodation

(*b*) Accommodation may not be hired for officers who are not entitled to free quarters or lodging allowance in lieu without the prior sanction of Govt , but in stations to which the Cantonments (House Accommodation) Act No VI of 1923 is applicable, accommodation may be appropriated under the Act, in which case recovery of rent should be made in accordance with the rules on the subject There is no objection, however, to a person who is not entitled to free quarters being permitted to occupy a house (on payment of rent) in cases in which

Govt. is committed to the payment of rental of a house which has fallen vacant and for which no entitled person is available as occupant.

(c) The G. O. C. of a District may not sanction the appropriation or hiring of a house for himself without previously obtaining the sanction of the G. O. C.-in-C. of the Command. Similarly the previous sanction of the G. of I. should be obtained if it is proposed to appropriate or hire a house for the G. O. C.-in-C. of a Command or the G. O. C. of an Independent District.

NOTE.- It will be incumbent upon the local military authorities to restrict the appropriation and hiring of houses to the numbers sufficient to meet the normal requirements of the garrison after account has been taken of the quarters owned by Govt.

44. Right to Quarters.—The following alone are entitled to claim quarters on payment of the rent authorised for their rank:—

Departmental W. O., other than those in the M. E. S. (excluding Barrack Dept.) and those in receipt of consolidated pay. But W. Os. of the A. R. Dept., Barrack Dept., Military Detention Corps, I. A. O. D. and I. A. S. C., who were entitled to this concession as a class prior to the 27th April 1920, may continue to enjoy it.

A conductor acting as an Assistant Commissary retains this right.

45. Occupation of quarters.—(a) Occupation of public quarters is on a basis of a monthly tenancy, and, unless an individual vacates his appointment or is transferred to another unit or station, rent should be recovered on a monthly basis even if the period of absence on temporary duty or leave is less than one month.

(b) A number of unmarried officers may be required to occupy a house jointly in cases where the accommodation which the house provides is more than sufficient for one officer, and in which the rent payable by Govt. is more than the amount which would be recoverable from one officer.

(c) A person absent from his station for a period not exceeding a month will not be called upon to pay rent for quarters at more than one station.

(d) An officer shall not be required to forfeit lodging allowance or to pay rent for accommodation which he may be called upon to occupy temporarily, when ordered on duty with a detachment of his unit to a Fort, at which special accommodation exists for this purpose.

(e) The occupant of a rented quarter may retain it while on privilege leave or temporary detached duty, if he pays the rent.

(f) The occupant of a free quarter may retain it whilst on temporary detached duty or privilege leave or in the case of Veterinary Assistant Surgeons and Sub-Assistant Surgeons (excepting those holding commissioned ranks) when on leave on full or ½ pay.

46. Compounds of Military Buildings.—(a) Except in any case, which has been specially authorised by Govt., the employment of *malis* as a charge against State funds for the purpose of maintaining gardens within the compounds of Govt. buildings used as offices is forbidden. The cleansing and removal of vegetation, etc., in such office compounds, in order to comply with cantonment rules, should be carried out by casual labour chargeable to office contingencies of the office concerned. Any receipts realised should be credited to Revenue.

(b) Where a building has been hired for use as an office and, under the terms of the lease, it is essential to employ a *mali*, the pay of the *mali* should be treated as part of the rent of the building chargeable to office contingencies. Any receipts realised should be credited to Revenue.

(c) In the case of hired buildings used as residences by Government officials who are not entitled to quarters free of rent, the onus of keeping compounds of these buildings clean and clear of vegetation, etc., rests with the tenants. Where a *mali* has to be employed for the maintenance of a garden under the terms of the lease, the pay of the *mali* should be

paid by the tenant, who will be entitled to any revenue derived from the garden

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under
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47. *Rent assessment.*—(*a*) Rents for all public quarters are assessed in accordance with the following rules, under which the C R E is authorised to fix the rent of a building unless otherwise fixed by Government

(*b*) The annual rent shall be sufficient to cover interest at certain rates, specified in the following table, on the capital cost of the building and its site (but see clause (*d*)), together with the average annual charges for maintenance and repairs —

Date of acquisition or construction	Rate of interest	
	Buildings occupied for the first time on or before June 19th, 1922	Buildings occupied for the first time after June 19th, 1922
Before April 1st 1919	3½	4
From April 1st, 1919 to July 31st, 1921	3½	5
From August 1st, 1921 to December 31st, 1921	3½	6
From January 1st, 1922 . .	6	6

[illegible]

(*d*) If the residence was constructed on land purchased by Govern[illegible]

taken as the cost of the site

(*e*) If there is no record of the cost of construction or purchase of a building, its value should be assessed and approved by the C R E

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(*i*) Charges for establishment and tools and plant will not be included either in the capital cost or in the maintenance charges

(*j*) When a building is occupied partly as a residence and partly as an office the capital value of the residential portion should be estimated

separately, and the cost of the maintenance thereof should be accounted for separately. Whenever separate office accommodation is provided for the occupant, or when the use of part of his residence as an office is optional, no deduction of rent is permissible.

(*k*) The portion of a G. O. C.'s residence occupied by his A. D. C. will be assessed separately for purposes of rent.

(*l*) When a private house is hired by Government, the assessed rent will be the rent actually paid by Government, but where a house is appropriated or hired on a repairing lease the assessed rent will also include the average annual cost of repairs and maintenance.

(*m*) The cost of a mess sergeants' quarter should be excluded when calculating the assessed rent of a mess house.

(*n*) Rent for furniture, electrical installations, also charges for electrical energy or water, are calculated in accordance with the rules on these subjects and are payable in addition to rent, unless otherwise ordered by the G. of I.

48. Rents payable by officers.—(*a*) The maximum rent chargeable for the occupation of Government quarters to military officers (including R. A. F.) shall be 5 per cent. of salary in the case of unmarried officers and 10 per cent. in the case of married officers, but they may pay the assessed rent if it is less.

NOTE.—The term "salary," for the purpose of assessment of rent under this paragraph, shall be held to be equivalent to the term "pay of appointment" as defined in Pay and Allowance Regulations, Part I (definitions), *i.e.*, including local allowances, tentage, interpreter's and lodging allowances, but excluding syce and forage allowance, office and contract allowance, also allowances drawn as separate items for special purposes, such as conveyance, travelling or detention allowances.

(*b*) An officer arriving at a station without his family will be classed as a single officer, unless he demands married quarters. (See also A. R. I., Volume II.)

(*c*) An officer must be allotted the full accommodation of his rank, when available, and must pay rent accordingly. He will not be allowed to occupy only a portion of the accommodation available for his rank (*e.g.*, half a quarter), or accommodation provided for a junior rank, in order to reduce his rent liability. Married quarters are usually suitable for occupation by two single officers and when so occupied, the two halves are each to be treated as a separate quarter. So long as an officer occupies and pays rent for less accommodation than he is entitled to according to his rank, the O. C. station must certify that the full accommodation is not available.

(*d*) When two or more officers occupy one set of quarters, the rent shall be charged proportionately to each.

(*e*) When stalls are provided in excess of the authorised number for the quarters of officers of British Cavalry regiments and batteries of R. H. A., and when the assessed rent, including the additional stalls, exceeds the rent payable under rule, an additional rent of Rs. 2 p.m. will be charged for each additional stall.

(*f*) If an officer at his own request occupies quarters superior to those authorised for his rank, or if a single officer occupies married quarters or two or more unmarried officer's quarters, he will be charged the assessed rent for each set of quarters, or the maximum rent payable by an officer of the rank for which each quarter occupied is suitable, whichever is less.

49. Rents for messes.—Rent for messes will be charged at one third of the maximum mess allowance admissible under Pay and Allowance Regulations (two thirds in the case of the Staff College, Quetta), or the assessed rent, whichever is less.

50. Rents for hostels.—Rent will be charged at the ordinary rates subject to following maxima (but see note 2 below) for accommodation, etc., provided in hostels for military officers including R. A. F. and

their families whose pay does not include lodging allowance as a separate item —

Per quarter including furniture, electrical fittings and servants' quarters but excluding current for electric light and fans	Rs 2-4 per diem recoverable from officers above the rank of subaltern
Ditto	Rs 1-4 per diem recoverable from subalterns
Current for electric light	Rs 7-8 per mensem or annas 4 per diem recoverable from all officers during the winter months
Current for electric light and fans	Rs 22-8 per mensem or annas 12 per diem recoverable from all officers during the summer months
Conservancy arrangements	One anna per diem per quarter

NOTE 1 —The date of the commencement and end of summer and winter seasons will be notified in station orders

NOTE 2 —For broken periods in any month the above flat rates will be charged

Garages	Rs 5 per mensem recoverable from each officer using a garage with a minimum charge of Rs 1-8 for broken periods of one week or under
Stables	Rs 1-8 per mensem recoverable from each officer using a stable with a minimum charge of 8 annas for broken periods of one week or under

51 [illegible] ers — [illegible] overn [illegible] g local [illegible] allow [illegible] reased

(b) The following maxima are payable in the cases specified —

Commissaries for quarters on a Captain's scale Rs 50 Deputy Commissaries Rs 30 Assistant Commissaries Rs 25 Conductors Rs 12 Sub Conductors Rs 8 This rule is not [illegible] Barrack [illegible] salaries [illegible] Military [illegible] entitled

(c) Departmental Officers Warrant and N C Os (u l) officiating in higher grades or in receipt of acting allowances without rank promotion should pay as house rent the sum which is included in their salaries on account of house rent

(d) Rent will not be charged for quarters within a prison compound occupied by a departmental officer or W O as an official of the prison

(e) A Departmental officer or W O who occupies superior quarters at his own request should be charged increased rent

52 Rents payable by other persons —(a) The local M E S officer will endeavour to get tenants for vacant buildings which should generally be let by the month

If let on other than a monthly tenancy the approval of the G O C in C is required

(b) For a house let to a private person, the rent shall be charged at the local rates for similar accommodation, provided it is not less than that assessed under the rules.

(c) If quarters are available and are not required for any person entitled thereto, they may be allotted as follows on the condition that they are vacated when required:—

(i) Rent free to a soldier's widow *for the period after his death*, during which marriage allowance or compulsory allotment is payable.

(ii) Rent free to Veterinary Assistant Surgeons other than those of the A. V. C.

(iii) To a chaplain on payment of the assessed rent, subject to the limit of 10 *per cent. of salary*.

(iv) *To a retired* W. O. awaiting a troopship, on payment of the rent for his rank.

(v) To the families of departmental W. Os. *allotted quarters in* hills at the rates prescribed in paragraph 51 (*b*).

(vi) To the family of an officer, W. O. or N. C. O. during his absence on active service, subject to rules that would apply if the husband were present and to whatever decision may be arrived at regarding the disposal of families.

(vii) *To the family of an officer or warrant officer of the* I. M. D. during his absence on permanent service at another station, or on active service, rent free accommodation in any available quarters of the class concerned, provided no extra expense is *caused to the State*.

(viii) Where pay is debitable to military estimates to any Government servant (other than employés in military farms). If his salary exceeds Rs. 100 p.m., the assessed rent or 10 per cent. of his salary will be recovered, whichever is less. If his salary does not exceed Rs. 100 p.m. the assessed rent or 5 per cent. of his salary will be recovered, whichever is less. If his salary does not exceed Rs. 50 p.m., rent will be specially fixed or remitted altogether under the orders of the G. O. C. District.

(*d*) In the case of re-employed pensioners who draw salary in addition to pension, to whom quarters are allotted, the amount of pension will be added to salary for the purposes of assessing rent liability.

(*e*) The G. O. C.-in-C. E. C., is empowered to rent on the following conditions the quarters known as the Old Conductors' quarters at Hastings, Calcutta, to the widows of European military personnel who are in indigent circumstances and to assess rent subject to the following limits:—

(i) *Pension drawn.*	*Minimum rent payable.*
No pension	No rent.
Re. 1 to Rs. 25 p.m.	Re. 1 p.m.
Rs. 26 to Rs. 50 p.m.	Rs. 2-8-0 p.m.
Rs. 51 to 75 p.m.	Rs. 3-8-0 p.m.
Rs. 76 to 100 p.m.	Rs. 5-8-0 p.m.
Rs. 101 to Rs. 140 p.m.	Rs. 7-8 p.m.

(ii) The occupants to give an undertaking *in writing, to vacate* the quarters immediately if required for military purposes.

(iii) If the quarters are not required for military widows, they may be allotted to other suitable persons subject to (ii) above, and on the understanding that they pay the full assessed rent of the quarters occupied.

(*f*) Staffs, depts. and formations outside A. H. Q., authorised to maintain printing presses, will be charged rent, if Government accommodation is used.

53 Rents for Institutes—(*a*) Rent will not be charged for institute buildings provided for departmental subordinates

other contractors in their capacity will pay rent at Rs 1-8 p m in for regimental institutes, such as water factories, grocery shops and supper bars For llotted to regimental institutes ital purposes the assessed rent electrical and water installation ater consumed and hire of fans

(*c*) Tenants of regimental tea rooms in lines of Indian units may be allowed to occupy available accommodation on payment of Rs 1 8 p m , no rent is recoverable if a tea room is run by a unit

54 Rents for costed services—(*a*) Rent will be charged by the M E S for accommodation for —

(i) Butcheries where animals are actually slaughtered and meat produced by Government butchers *e g* in Waziristan
(ii) Bakeries
(iii) Clothing factories—accommodation used for manufacturing purposes only
(iv) Mechanical Transport workshops other than residential accommodation and that used for Central Mechanical Transport Stores

(*b*) Rent for the whole year will be assessed in accordance with paragraph 47 and will be debited as a lump sum to 48 Army and credited to XXXVIII M E S receipts

(*c*) No rent will be recovered for storage accommodation in clothing factories and depots

55 Rent collection—(*a*) The procedure for recovery of rents is laid down in the M E S Account Code

(*b*) Rents of quarters in charge of the Farms Department will be collected by Farms agency, and will be credited to Government through the accounts of the Farm concerned All arrangements for hiring quarters for Farms subordinates and payments to owners on account of rent therefor will be made by the Farms Department

(*c*) Recoveries of rent for hired buildings will be credited as refunds of expenditure, except as regards officers whose emoluments include lodging allowance as a separate item

56 Rent remission—(*a*) If for any reason a building is rendered wholly or partially uninhabitable the occupant shall at once report the fact to the local M E S officer and the G O C District may sanction a proportionate remission of rent from the date of the report

constitute hardship

(*c*) Except in accordance with the above rules all reductions or remissions of rent or reduction in capital value require the sanction of Government Applications should contain the following particulars, certified by the C M A

(i) Capital value of building and site (giving reference to Annual Return of Public Military Buildings)
(ii) Average maintenance charges (*vide* paragraph 47)
(iii) Rent according to rules

(iv) If any portion of the building is used or proposed to be used as an office, state the area of office accommodation required, area authorised for the purpose, total area of building, and rental deduction proposed.

(v) Rent payable by the occupant, stating his average salary including allowances.

(vi) The market rent for similar accommodation.

(vii) Average rent chargeable under the rules for other Government buildings with similar accommodation.

(viii) Rent or reduction in capital value proposed, and from what date, giving the reasons upon which the proposal is based.

57. Compensation for inferior quarters.—(*a*) When under the Pay and Allowance Regulations compensation is to be paid for inferior accommodation, it will be a proportionate sum based upon the floor area of the main rooms as compared with the scales given here:—

	Plains sq. ft.	Hills sq. ft.
(i) Senior Asstt. Surgeons with the rank of Major or Captain	1056	674
(ii) Senior Asstt. Surgeons with the rank of Lieut.	800	474
(iii) Asstt. Surgeons 1st and 2nd class	756	480
(iv) Asstt. Surgeons 3rd and 4th class	608	480
(v) School-Mistresses	576	480
(vi) British N. C. Os. in departmental employ	576	472
(vii) Principal Foreman, O. D.	1056	674
(viii) Civil Chief Master Armourer	1056	674
(ix) Foremen, O. D. and others graded as such	800	474
(x) Storeholders	800	474
(xi) Assistant Foremen, O. D. and others graded as such		
NOTE.—(*a*) For those whose agreements specify class 'C' semi-detached quarters	1106	756
(*b*) For those whose agreements specify class VI quarters	864	600
(xii) Assistant Storeholders	864	600
(xiii) Chargemen O. D. and others graded as such	576	472
(xiv) Sub-Assistant Surgeons (not holding commissioned ranks of Capt. or Lieut.) and Veterinary Assistant Surgeons ranking as I. Os.	336	336
(xv) Sub-Assistant Surgeons and Veterinary Assistant Surgeons ranking as W. Os.	192	192

(*b*) When a departmental officer (or a W. O. who is entitled to claim quarters on payment of rent), is allotted main room accommodation inferior to the following scales, his rent will be proportionately reduced:—

	Plains	Hills
(i) Commissary or Deputy Commissary	1056	674
(ii) Assistant Commissary	800	474
(iii) Conductor	756	480
(iv) Sub-Conductor	608	480

(*c*) If the families of departmental W.Os. are allotted and actually occupy quarters in the hills not up to the full authorised hill scale for

the class of quarters to which their husbands are entitled in the plains, their rent shall be reduced proportionately on the floor area

58 Taxes—(a) *Cantonment Taxes*—Govt is exempted from taxation leviable in cantonments on buildings or lands of which they are owner or occupier But see para 87 regarding water taxes

(b) *Municipal Taxes*—Municipal taxes on Military buildings or on buildings hired by the M E S for authorised purposes, other than on quarters, are payable by the Military Estimates

(c) Taxes which are by local rule or custom, leviable on the tenant are payable by the occupant during his occupancy, even though he is entitled to rent free quarters, subject to the provisions of sub paras (d) (e), (f), and para 87

(d) When Departmental W or N C Os occupy public quarters outside a cantonment, any house, ground, street lighting or conservancy tax levied by a Municipality will be paid by the M E S But see para 87 regarding water taxes

(e) Taxes, which by local rule or custom are leviable on the owner, are in the case of buildings the property of the State paid by the Military Estimates and treated as part of the assessed rent of the buildings

(f) In cases where a tax has to be paid partly by Govt and partly by the occupant, the tax will be paid in full by the M E S and the amount payable by the occupant recovered from him

(g) *General*—Govt sanction is not needed to the payment of taxes, when such have been assessed by competent authority, unless the G O C District or the head of Dept, etc, considers that the assessment is excessive

SECTION V.—BUILDINGS AND ROADS.

61. Scales and Designs of Buildings.—(*a*) The scales of accommodation and the general designs of quarters, and of certain other buildings have been approved by the G. of I., *e.g.*, the dimensions of rooms and verandahs and the general nature of the floors, walls, and roofs. In other cases the general design and specification is to be furnished with the plinth area estimate and will be approved by the authority competent to accord *administrative approval to the work*.

(*b*) The scales of accommodation and general designs and specifications as approved by the G. of I. are contained in the *Barrack Synopsis*. Any deviation from the approved scales requires the approval of the G. of I. in the case of new buildings, and of the administrative authority competent to approve the estimate in the case of the adaptation of existing buildings for purposes which can be authorised without the sanction of the G. of I.

(*c*) Standard plans of buildings, embodying the approved scale, general design and specification will be issued by the E.-in-C. and copies are to be maintained in the offices of C. Es., C. R. Es. and G. Es.: copies will also be furnished to local administrations for use by the P. W. D. in areas where they execute military works.

(*d*) Standard plans are to be regarded as a guide and provided that no deviation is made from the approved scale, general design and specification, the standard plan is to be adapted, when framing the detailed estimate, to suit local conditions, having due regard to economy and structural efficiency. Material deviations from the detailed estimate found necessary during construction are to be referred to the engineer authority, who sanctioned the estimate.

(*e*) Unless otherwise ordered by the G. of I., changes in scales of accommodation or general designs need not be applied in the case of estimates to which administrative approval had been accorded before the introduction of the change.

62. Works Estimates.—(*a*) Estimates are of three kinds, *viz.*, Approximate, Plinth Area or Abstract and Detailed.

(*b*) An approximate estimate is required in order to enable the administrative authority who is competent to approve the expenditure or to submit the proposal to the G. of I. for approval, to decide whether a work should be accepted with or not, *i.e.*, whether or not a plinth area or abstract estimate should be prepared. An approximate estimate may be called for by the O. C. station or local head of a service or dept. from the local M. E. S. officer, or by any Commander or head of a service or dept. from his engineer adviser. The estimate will ordinarily be furnished by or obtained through M. E. S. channels from the engineer officer who will be charged with the execution of the work. This estimate must be accepted at each stage by the engineer adviser of the administrative officer concerned before submission to the next higher authority. An approximate estimate should contain sufficient details to enable engineer officers in higher formations to judge whether the cost given is likely to cover the expenditure. If sufficient information is not given further details should be called for through engineer channels.

(*c*) A plinth area estimate in the case of buildings, or an abstract estimate in the case of new roads, large bridges or drainage systems, is required for the accordance of administrative approval by C. F. A. and will only be prepared, when the C. F. A. concerned (Q. M. G., M. G. S. or A. O. C. when the administrative approval of the G. of I. or S. of S. is required) has decided that funds can be made available for commencing the work during the current or ensuing financial year. The estimate will be called for and submitted through engineer channels, but in each formation the approval of the commander or administrative authorities concerned must be obtained: also, when accommodation or hospital buildings or water-supply or drainage schemes are involved, of the medical authorities; and, when accommodation, etc., for animals is involved, of the veterinary authorities.

(d) A plinth area estimate will be prepared on I A F W 1792,

the expenditure is justified and that the proposals are economical and suitable from every point of view the time required to complete the

(e) An abstract estimate for a road, large bridge drainage system, etc , is to be prepared in the same way as a plinth area estimate In the case of a road the estimate will consist of—

(i) a map of the country showing the proposed alignment

(ii) a detailed survey of the road, accompanied by a longitudinal section the position is to be indicated of all bridges cause ways and culverts,

(iii) a report explaining the necessity for the road, exactly why the alignment proposed has been selected the arrangements proposed for the construction and the time required,

(iv) a general specification indicating the width of the formation and metalling arrangements for drainage sizes and nature of culverts causeways and bridges maximum and ruling gradients, arrangements for crossing or turning places, etc ,

(v) an abstract estimate showing each item of work contemplated and indicating in each case how the cost has been arrived at

Abstract estimates for large bridges drainage systems etc are to be prepared in a similar manner In the case of bridges a site plan is needed and the report should state clearly the results of investigations as to the velocity of flow maximum flood level, and the nature of the bed and banks the necessity for protective works and depth of foundations is to be fully discussed

(f) Whenever necessary separate provision is to be made in all plinth area and abstract estimates for charges such as the following —

(i) special establishment,

(ii) special tools and plant,

(iii) charges of political nature,

(iv) unforeseen contingencies

NOTE —Where the cost of the work is enhanced due to political or other abnormal reasons, the estimated amount of the extra cost should be noted

(g) A detailed estimate for a work (other than upkeep) will be prepared on I A F W 1793 1798 Large estimates are to be prepared in sections and the total cost brought together in a general abstract

(*h*) Before a detailed estimate for an important building, etc., is put in hand, rough proposals are to be submitted for approval to the engineer authority competent to accord technical sanction, and he may dispense with such portions of an estimate as he considers unnecessary, *e.g.*, detailed measurements when a lump sum contract is contemplated. Unless otherwise ordered the preparation of detailed estimates is not necessary in the case of works (or subworks in the case of major works) estimated to cost not more than Rs. 3,000.

(*i*) A detailed estimate for a work will comprise:—

(i) Reference to the orders of the approving administrative authority, quoting the number of the item in the plinth area estimate and the amount approved.

(ii) Report containing—

A brief history of the case.

Description of existing accommodation, conditions, etc.

Description of proposed work, referring to the regulations on the subject and to approved designs and giving an explanation of any departures therefrom. When no general designs, etc., exist, the reasons for adopting the proposed design are to be stated.

Total cost of the work and how it compares with the ordinary cost of similar works in the station: reasons for excessive cost to be stated.

Time required to carry out the work and the arrangements proposed for its execution.

(iii) General specification.

(iv) Detailed specification. Where detailed specifications are included in the district schedule of specifications, a reference thereto is sufficient.

(v) Calculations for the stability of all structures and strength of the materials used.

(vi) Detailed measurements (bills of quantities) for each class of work proposed.

(vii) Abstract of the quantities of each class of work, the rates per unit, and the total cost. Lump sum amounts may be entered for items when measurements are not possible. The rates will be taken from the district schedule of rates: details of any special rates are to be furnished.

(viii) Provision is to be made for any incidental expenses such as compensation for land, sheds for workmen, etc., and 5 per cent. of the total estimate will be added for contingencies.

(ix) When the employment of special establishment is necessary a detail is to be given of the personnel proposed with their rates of pay, period of employment and total cost: charges on this account should not usually exceed 2 per cent. of the total cost of the work.

(x) Detailed drawings consisting of:—

Site plan, indicating the position on the ground of every building, etc.

Plans at floor level, showing the positions of beds, doors, windows, wall cupboards, and all fittings: the direction in which doors and windows open is to be shown.

Cross sections to indicate the measurements and details of construction.

Elevations and foundation and roof plans when necessary.

Large scale drawings of details, *e.g.*, roof trusses, important joints, doors, windows, etc.

(*j*) All drawings and the report and abstract of cost are to be signed by the officer preparing the estimate. The sanctioning officer will sign the abstract. The signature of the O. C. station or local head of the service or dept. concerned is to be obtained to floor level plans of all

buildings before work is commenced and also the senior medical or veterinary officer in the cases referred to in clause (c)

(k) In every district there is to be maintained in the offices of the C R E G Es and S D Os
a standard schedule of rates
changes in the approved distr
require the approval of the C
annually (see also M E S Ac
to prevent an officer accepting tenders at a percentage above schedule rates subject to prescribed rules

63 Military Land —(1) The cost of acquiring land is debited to
50 M E S when the land is required for the Army generally and to
48 Army when required for Ordnance Factories Military Farms or R A F

(b) The M E S are responsible for the erection and maintenance of boundary pillars enclosing military land Pillars are to be numbered consecutively the number being cut or painted on each pillar They are to be sited in such a manner that from each pillar the next pillar on either side is easily visible with the naked eye

64 Cantonment Plans —(a) The survey and when necessary the re-survey, of a cantonment will be carried out by and at the cost of the Survey of India

(b) Applications for original surveys or re surveys are to be submitted to the Army Department

t less than 12 inches to the
C R Es of Districts who
are responsible for maintain
to date in their own offices

(d) *A plan of every cantonment in India will be maintained in the* office of the E in-C and of every cantonment in a Command in the office of the C E The C R E is responsible for sending a corrected plan of every cantonment in his district annually to the E in C and the C E by August 1st, receiving in return the old plan

(e) The C R E will send annually by August 1st to the Survey of India, Debra Dun a set of survey sheets for each cantonment containing the corrections for the year The Survey of India will draw the corrections on the original plans and, when required will issue new additions of the original survey

65 Sites —(a) The suitability of sites on military land required for any military purpose will be considered by the Standing Barrack Committee The proceedings accompanied by a plan furnished by the local M E S officer will be forwarded through the ordinary channels to the competent approving authority as specified below

(b) If the proposals involve the acquisition exchange or relinquishment of land, or the return to military occupation of land vested for management in a Cantonment Authority the approval of the Govt of India will be obtained by the Q M G or by the M G S if only the interests of Ordnance Factories or military farms are affected or by the A O C, if only R A F interests are affected

(c) *Sites for buildings within a work of defence or the clearance* zone thereof may be approved by the G O C District in accordance with the rules contained in para 68

(d) In other cases where the sanction of the Govt of India is not required for sites of new works *e g* the erection of a building by the M E S within an area already in its charge sites for new works costing not more than Rs 10,000 may be approved by the Brigade or Brigade Area Commander and for those costing over Rs 10 000 by the G O C District

(e) In
solely for
dept or
works of

h have been appropriated
military farms, the Remount
other military interests no
works may be approved by

the local head of the service or dept., if the cost of the work does not exceed Rs. 10,000 and in other cases by the head of the service or dept. Where living accommodation is affected the concurrence of the medical officer in charge should be obtained.

(*f*) The construction of new buildings, etc., within a cantonment is dealt with under sections 179 to 189 Cantonments Act, 1924 (Act II of 1924) which must be complied with in all respects.

(*g*) When a proposed site encroaches on or in any way affects a civil or railway dept. roads, land or interests, the consent of the authority concerned will be obtained by the G. O. C. District.

66. Buildings.—(*a*) The M. E. S. (local P. W. D. officer in the case of military buildings in P. W. D. charge) will maintain "Registers of Public Buildings" for each and every building, etc., in their charge, showing:—

(i) the purpose for which constructed;
(ii) the purpose for which utilised;
(iii) the accommodation provided;
(iv) the nature of the walls, floors and roofs;
(v) the outside dimensions at plinth level and the plinth area;
(vi) the total capital expenditure thereon;
(vii) the value of land if purchased by Govt.

The authority for and date of construction and any subsequent changes will be noted in the margin. Separate registers will be maintained for every military station, etc., and for buildings belonging to the Army, Ordnance Factories, R. A. F., and civil administration. A copy of each register will be maintained in the offices of the C. R. E. and G. E.; also, for Army, Ordnance Factories, and R. A. F., in the offices of the C. E. and E.-in-C.; also, for civil buildings, in the office of the secretary to the local administration. The C. R. E. (local P. W. D. officer in the case of military buildings in P. W. D. charge) is responsible for keeping the registers corrected up to date and for furnishing annually by August 1st a corrected copy to each office, receiving the old copy in return. All items of capital expenditure, other than on furniture and E. & M. plant, should be recorded in these registers. Buildings and other structures which form part of electrical, water supply, ice-making installations and workshops will be shown separately in the register. These registers are open to audit inspection.

(*b*) A record plan of every building and other structure in his charge is to be maintained in the office of the G. E., who is responsible that all such plans are corrected up to date.

(*c*) Every main building will have a distinguishing number conspicuously painted thereon; subsidiary buildings will be numbered with the main number of the building followed by a letter, thus $\frac{200}{A}$: A being used for cookhouses, B for latrines, C for lavatories, D for urinals, E for lamp rooms, F for servants quarters, G for stables, H for coachhouses or garages and J for enclosure walls or fences.

(*d*) Each room in a regimental building will be numbered and its area, cubic contents, and the purpose for which it is used, painted on one door.

(*e*) No addition or alteration of either a permanent or temporary nature may be made to any military building even at private expense, without the approval of the O. C. station. This rule does not permit of the execution of works beyond his financial powers.

(*f*) The G. E. is responsible for seeing by periodical inspection that proper care is taken of military buildings, *e.g.*, that upper floors are not overloaded, walls not unduly stressed in store rooms, and that inflammable screens, etc., are not erected. Every Govt. owned or hired building is to be inspected by the G. E. once a year.

(*g*) Powder magazines and all buildings, which from their height or situation are likely to be struck by lightning, should be provided with lightning conductors, which are to be examined and tested annually.

(h) The M E S are responsible for providing hydrants, tanks or hooks for fire buckets, when necessary The G E is responsible for bringing to the notice of the O C station or local head of service or [illegible]

[illegible]

suring the building at its book value against fire and in the case of cinemas encloses the apparatus in a non-combustible enclosure

67. **Roads**—(a) For purposes of construction roads are technically classed as follows —

Class I Continuous M T traffic roadway 24 feet, metalling 16 feet, fully bridged

Class II Intermittent M T traffic roadway 20 feet, metalling 12 feet, bridged at perennial streams and wherever traffic is likely to be impeded for more than 24 hours

Class III Occasional M T traffic roadway 18 feet, metalling 9 feet, unbridged except at perennial streams

Class IV	Cart road roadway 12 feet	Unmetalled and only bridged where absolutely necessary
Class V	Camel road roadway 9 feet	
Class VI	Mule road roadway 8 feet	

Roads in cantonments are ordinarily fully bridged

(b) For purposes of construction and maintenance, roads inside cantonments are classified as follows —

(i) Military (including R A F and Ordnance Factories) roads required for p[illegible] of troops, tho[illegible] to the main c[illegible] the country [illegible] (see also para [illegible])

(ii) Civil (Imperial or provincial) Sections of the main arterial communications of the country, which happen to be within the limits of the cantonment and are required for civil purposes independently of the existence of the cantonment Such roads are maintained from civil funds

(iii) Cantonment roads required only for the convenience of residents in cantonments Such roads are maintained from cantonment funds

[illegible] can [illegible] the [illegible] the [illegible] G [illegible] civil [illegible] incl

by the G O C district for cantonment roads the concurrence of th[e] cantonment authority will be obtained by the O C station The classification will be examined every 5 years, with a view to re-classification if found necessary

(d) Roads outside cantonments or military stations are ordinarily constructed and maintained as civil works, but, where charged to military estimates in special cases, they will be handed over under the orders of the G of I as soon as possible to the local administration for maintenance

(e) The classification of a civil road as a road of military importance requires the sanction of the G of I In special cases where for [illegible] reasons it is required to maintain even a road at a higher standard than is considered necessary for civil purposes, the orders of the G of I should be obtained as to what contribution, if any, should be paid to the local administration to cover the extra cost of [illegible]

(f) No existing road in a cantonment may be closed, except for repairs, and no new road opened without the approval of the G. O. C. district.

(g) No unmetalled military road may be metalled in the first instance without the approval of the G. of I. The widening of an existing military metalled road in a cantonment or military station in respect of the roadway or metalling may be dealt with as an ordinary work.

(h) Each G. E. will maintain a plan of all military roads in his charge, showing the position and dimensions of all bridges, culverts, etc. He will also maintain a register showing separately for each road—

(i) Class of road and length.

(ii) Expenditure on new construction (capital outlay).

(iii) Annual expenditure on renewals of metalling.

(iv) Annual expenditure on repairs and upkeep.

(i) The following distinguishing colours will be used for roads on all plans: military—red: civil—blue: cantonment—green: civil roads of military importance—yellow. Metalled roads will be shown in continuous double lines, unmetalled roads in dotted double lines.

(j) When any new road has been completed, a correct plan of it is to be sent to the Survey of India by the C. R. E.

68. **Defences.**—(a) Works of defence are classified by the C. G. S. as Class I, Class II or Class III according to their importance. Clearance zones (Classes A, B, C) will be prescribed and clearly demarcated in the vicinity of all works of defence, and all land within such zones will be dealt with in accordance with the "Indian Works of Defence Act, 1903" (see Appendix D). The clearance zones at Aden, Fort William and Fort St. George are subject to special rules.

When a clearance zone has been notified, except in so far as the notification may authorise modifications, no infringement of the restrictions imposed under the Act shall be permitted by any official or private person without the previous sanction of the O. C. or G. O. C. within their powers of exemption as specified in the Act, or by the G. of I. Without the previous sanction of the G. of I. no State land within the prescribed clearance zone shall be transferred to, sold to, exchanged with, or permanently occupied by, any private person or municipality or corporation not immediately subject to the executive orders of the G. of I.

(b) Whenever expenditure is to be incurred from Military funds or whenever military land or buildings are affected, proposals for new works of defence, or for additions or alterations to works of defence costing over Rs. 10,000, or for any changes in clearance zones, are to be submitted to the C. G. S., who will obtain the approval of the G. of I. Additions and alterations to works of defence costing not more than Rs. 10,000 may be approved under the rules contained in para. 23.

(c) When a local administration wishes to construct a defensive work the entire cost of the work will be borne by the local administration.

In the case of N.-W. F. P. and Baluchistan the local military authority will be responsible—

(i) for the siting of posts and obstacles;

(ii) that the posts are defensible in all respects;

(iii) that loopholes are efficiently sited;

(iv) that railway buildings on a line exposed to tribal attack are sited to the best advantage for both military and railway requirements.

(d) Plans of all works of defence in their areas will be maintained in the office of the brigade area or district commander and at Command H. Q. Copies of plans of Class I defences will be maintained by the C. G. S. The brigade area or district commander is responsible for informing all concerned of any corrections to the plans. The plans will

comprise a general plan of the whole defences showing the clearance zones, also large scale plans and sections of important portions

(e) A plan of the prescribed zone will be prepared on a scale sufficiently large to show all ...

aty as follows —

(i) Statement of any defects or deficiencies

(ii) A certificate that the plan and schedule of the clearance zone has been compared with the actual buildings etc on the ground and that no buildings etc have been erected other than those noted in the certificate

(iii) Statement of any action taken or proposed to be taken locally to remedy defects etc brought to notice

(iv) Statement of any additions or alterations carried out since the last report

(v) Statement of any additions or alterations authorised but not yet completed in each case the authority and amount of the estimate to be stated, as well as the probable date of completion

(vi) Statement of any further additions and alterations recommended stating in each case the approximate cost and the necessity

In the case of Class I defences the annual report will be submitted to the C G S in the case of Class II and III defences it will be retained at Command or independent district H Q

NOTE I —The officer detailed to carry out the inspection should be accompanied by a R E officer

NOTE II —In the case of the following works of defence reports are required at the intervals stated —

(i) Drosh and Chitral (after withdrawal of regular troops) Buxar (Bhutan) and Dibrugarh—2 years

(ii) Gilgit—3 years

(iii) Gauhati Jamalpur, Dhanbad, Badarpur, Chilas and Gopis—5 years

The Civil Engineer in charge of these works of defence should submit an annual report to the G O C district regarding the structural fitness of the work generally and a certificate regarding encroachments in the clearance zone

(j) Whenever a clearance zone which it is proposed to have pre ... or railway dept, the ... horities concerned of ... applied Any subse-

(k) Estimates for works of defence will be prepared by the agency executing the work If the work is to be carried out by any agency other than the M E S, the estimates will be prepared in consultation with the C R E of the district or such R E officer as may

nated by the G. O. C. district or higher military authority. The C. R. E. or such special R. E. officer as may have been detailed will be responsible for inspecting the work during construction, in consultation with the agency charged with the execution, and on completion will furnish a certificate to the G. O. C. district regarding the fitness of the work, a copy of the certificate being given to the agency executing the work.

(*i*) Should the civil or railway authorities wish to use for the accommodation of their staff or other purposes any portions of a work of defence which is maintained from military funds, the question of rent, etc., will be dealt with under the ordinary rules, and occupation will be subject to the condition of inspection at any time by the military authorities and to the right of re-occupation without notice in case of emergency.

69. Railway Works.—(*a*) When any work is required in connection with railways for military purposes, the G. O. C.-in-C. Command or G. O. C. independent district will address the Agent of the Railway concerned and each party will appoint a local representative to work out details and to arrange the division of work to be carried out by each agency.

(The agency for the construction and repair of authorised buildings for railway units of the Anciliary Force will ordinarily be the Railway administration concerned.)

(*b*) Plans should be prepared and signed by both representatives. Approximate estimates will be worked out in consultation, showing the initial and recurring expenditure chargeable to (i) railway estimates, (ii) Military estimates respectively.

(*c*) The plans and estimates will then be forwarded to the G. O. C. concerned, the railway estimate being sent through the Agent. The G. O. C. will forward them through Command H. Q. to the Q. M. G. who after approval (in consultation with the F. D. (M. F.)) will return them and call for detailed estimates to be prepared and submitted in the same manner for Govt. approval.

(*d*) All expenditure on works required for military purposes on railways or sections of railways classed as Military lines (*vide* App. E) should be adjusted in accordance with the following rules:—

Rule A.—Chargeable to *Railway* funds:—

(i) The cost of all works necessary for the adequate handling and transport by the Railway, in its capacity as a carrying agent, of military personnel, animals and stores. Under this head are included such works as the formation and permanent-way of sidings, signalling arrangements, raised or rail level platforms of ordinary width and surface for entraining and detraining troops and animals, and for loading or unloading stores, lighting arrangements in railway yards and on railway platforms, all ordinary station buildings, railway staff quarters, and such water supply as is necessary for the working of the railway.

(ii) The cost of all land required in connection with the above works.

Rule B.—Chargeable to *Military* funds:—

(i) The cost of all works unconnected with the actual working of the railway, but needed by the military authorities for their own administrative purposes. Under this head are included all works necessary for the conveyance of personnel, animals and stores to and from the railway, such as roads, whether approaching the metals at rail level, metalled surfaces in lieu of platforms, metalled surfaces for parking transport vehicles, sheds specially required for the storage of military supplies, buildings, lighting arrangements and water supply unconnected with the actual working of the railway.

(ii) The cost of land required in connection with the above works, unless the railway authorities prefer to acquire such land themselves.

mutandis in cases where the railway derive their water from a military installation

Rule C—The cost of maintenance will in each case follow the incidence of the initial expenditure on the work

(e) All expenditure on works required for military purposes on railways which are not classed as military lines should be adjusted in accordance with the following rules —

(i) The cost of the construction of troop sidings platforms etc will be charged against military estimates Recoverable

(ii)

supervision so far as State railways worked by the State are concerned will be leviable at the rate of 12½ per cent only on the cost of works debitable to military estimates

N B—The rate of 8½ per cent applies in case of capital expenditure incurred after 1st November 1922 In other cases the following rates —

7 % up to 31st March 1918

8½ % from 1st April 1918 to 31st March 1920

9½ % from 1st April 1920 to 30th June 1922

9 % from 1st July 1922 to 31st October 1922

(iii) If the platforms and sidings required take off the main line beyond the limits of a station yard the necessary signalling

erms as the plat-
istration will be
working of such
to military esti

(iv) When land has to be acquired for the sidings or platforms, the amount payable for the land will be included as part of the cost of the work chargeable to military estimates, unless the railway administration concerned prefers to acquire the land for its own purposes

(v) In the case of any sidings or platforms completed before the 18th April, 1896, the whole cost of which including materials, has been paid for from military estimates the railway will charge only 2½ per cent for maintenance on the whole cost, exclusive of the cost of land

If the sidings are abandoned the railway will be recouped, from military estimates the cost of taking up and returning to store the permanent way and other materials

(f) The C R E will maintain a list of sidings and platforms for which payments are made to the Railway Dept showing the capital expenditure charged to military estimates and the annual payment made Before any annual payment is made the C R E will obtain a certificate from the District H Q to the effect that the particular sid-

ing or platform is required for military purposes. If a siding is no longer required the Q. M. G., M. G. S. or A. O. C. will be consulted regarding its disposal.

70. Landing Grounds.—(*a*) Landing Grounds are classified as follows:—

(i) Aerodrome, if equipped with hangars, etc.

(ii) Petrol Landing Ground, where aviation petrol is obtainable from a shed on the ground or from some source nearby.

(iii) Emergency Landing Ground, where aviation petrol may be available, but not necessarily so.

(iv) Vacated Landing Ground; required to be retained, but not maintained.

(v) Co-operation Landing Ground; an emergency landing ground required for co-operation training between the Army and the R. A. F.

(*b*) All charges connected with classes (i) to (iv) are met from R. A. F. funds. Charges for co-operation landing grounds will be met from the training grants of the districts concerned. Charges for other landing grounds are not debitable to Army or R. A. F. funds.

(*c*) Sites for landing grounds inside cantonments will be selected by the Standing Barrack Committee, which must include for the purpose an officer of the R. A. F. and a district staff officer. If the site selected lies within land under the cantonment authority, a copy of the opinion of that body with an assessment of the compensation, if any, to be paid will be attached to the proceedings. One copy of the proceedings will be forwarded through the usual channels to the Q. M. G. and one copy through R. A. F. channels to the A. O. C.

(*d*) Sites for landing grounds outside cantonments will be selected by a R. A. F. officer in communication with the G. O. C. district. He will prepare a report stating fully whether the land is Govt. military land, Govt. civil land, Provincial Govt. land or private land; also the reasons for selection and the cost (ascertained from the civil authority concerned) of hiring and acquiring respectively. After the remarks of the G. O. C. district have been obtained, one copy of the report will be sent by the G. O. C. through the usual channels to the Q. M. G. and one copy by the R. A. F. officer through R. A. F. channels to the A. O. C.

(*e*) The transfer of military land to the R. A. F. may be approved by the Q. M. G. and the transfer will be free of charge, if no expenditure is involved on acquisition of land in replacement. When the acquisition of land is involved or the transfer of land in cantonments under the control of the Cantonment Authority, the sanction of the G. of I. will be obtained by the A. O. C.

(*f*) The M. E. S. are not concerned with landing grounds in Indian States.

71. Cantonment Sanitation.—(*a*) Local M. E. S. authorities must abide by the provisions of the Cantonments Act, 1924 (Act II of 1924) and the rules made thereunder regarding sanitation and matters connected therewith. The Cantonment Authority is responsible for the proper drainage of a cantonment as a whole, the M. E. S. being responsible only for military properties in the cantonment.

(*b*) Regimental gardens for the disposal of bath water are only to be taken over by the M. E. S., when lines are vacant.

(*c*) The M. E. S. may be called upon to provide grass huts for troops and Govt. followers suffering from infectious diseases.

72. Repairs and Renewals.—(*a*) Repairs and renewals are divided into:—

(i) Periodical repairs.

(ii) Petty repairs.

(iii) Renewals.

(b) The principal periodical repairs are —

Annual —Internal white or colour washing

Biennial —Oiling wood work or treating with solignum

Quadrennial —External white or colour washing Painting of walls woodwork ironwork or furniture Distempering or papering of walls

The intervals at which periodical repairs are to be carried out may be varied by the C R E Any building may be white or colour washed on sanitary grounds on the requisition of the Medical or Veterinary officer in charge

estimates, pared and st be made asurement When pre- be checked the book

(d) Petty repairs will be demanded by O C units etc on I A F W 1833 which is to be sent to the G E who is responsible for assessing and recovering any barrack damages (see A R I Vol II and M E S Account Code)

Demands other than those arising from inspection of buildings may be made at any time if of an urgent nature

(e) Renewals will be carried out on a definite programme to be decided by the C R E

(f) Repairs to and the renewal of stable floors of mounted units lotment per stall will be t E to the O C unit of the financial year ½ when completed to the mander The G O C adopted in the case of

73 Miscellaneous —Incidence of cost of supplying high pressure oil lamps and apparatus —

(i) When required for troop sidings or platforms the incidence of cost will be decided in accordance with the rules in para 69 and the work will be carried out by the Railway Dept

(ii) In all other cases the M E S are responsible only for the supply, erection and maintenance of lamp posts winches, tackle or other apparatus required for lifting the lamps into position

SECTION VI.—ELECTRICAL AND MECHANICAL.

81. Responsibilities of the M. E. S.—(*a*) The M. E. S. are responsible for the construction, upkeep and operation of Army Dept. installations, for the provision of electrical energy, water or ice, in accordance with the rules in this section. They will also provide and maintain workshops and undertake such manufacturing operations as may be necessary in connection with their duties.

(*b*) The M. E. S. may be called upon in accordance with these rules to provide, erect, maintain and operate machinery required by other services or depts. of the Army (but see clauses (*c*) and (*d*)). The M. E. S. shall also be responsible for the erection of specialist machines, if the staff maintained by the dept. is not capable of carrying out this work. The division of responsibility between the M. E. S. and the service or dept. concerned must be defined in each case, as well as the incidence of cost, in accordance with these orders.

(*c*) When a service or dept. maintains a mechanical staff for the purpose, they will be entirely responsible for the provision, upkeep, and operation of all machinery, but the M. E. S. shall be responsible for the provision, erection, maintenance and operation of the motors, engines, shafting, wiring, etc., installed in connection with the distribution of power up to specialist machines. In the case of depts. which have a staff competent to run the installation as a complete unit the M. E. S. are to be consulted before any plant is installed for the development of power and if considered desirable the power may be supplied by the M. E. S.

NOTES.—(i) In the case of specialist machines driven by shafting, the M. E. S. will be responsible up to the shafting driving the machine, but not for the belt itself.

(ii) In the case of machines driven by direct coupled or chain-driven electric motors, the M. E. S. will only be responsible up to the main fuzes protecting such motors.

(*d*) The M. E. S. are not responsible (except as regards the supply of power, if the particular installation is not self-contained) for the provision, maintenance or operation of machinery in the following cases:—

(i) X-ray plants: mineral water factories.

(ii) Internal combustion transport vehicles even if fitted with water filteration plants, electric generating plant or disinfectors.

(iii) Machinery used in Ordnance depôts or workshops, clothing factories, Ordnance factories, Medical store depôts, Supply depôts (including bakeries or butcheries), Dairies or Grass farms, Remount depôts, M. T. depôts or workshops, R. A. F. depôts or workshops, Marine Dept. and all machinery in regimental charge.

(iv) If so desired by any military service a C. R. E. may undertake the supervision of the operation and maintenance of specialist machinery, the expenditure being met by the service concerned.

NOTE.—To avoid duplication of staff the factory authorities may carry out works which are responsibilities of the M. E. S., and which have received administrative approval and technical sanction under M. E. S. rules, subject to all expenditure being finally adjusted against M. E. S. estimates. Similarly the M. E. S. may carry out works for the factories authorities. Such arrangements will be settled locally between the M. E. S. and factory authorities concerned.

(*e*) If the M. E. S. are required to erect or repair machinery or to supply power, they are to be consulted regarding its provision and proposed arrangement and, whenever buildings in M. E. S. charge are used as workshops, etc., the M. E. S. are to be consulted regarding the lay-out of machinery.

(f) The M E S are responsible for the construction of foundations for all machinery except in the case of Ordnance factories etc unless required by the M G S to undertake the duty

(g) The M E S are responsible for the provision erection and upkeep of all types of disinfectors other than those mounted on lorries and for the operation of high pressure steam disinfectors, and also low pressure steam disinfectors where the steam is supplied by a separate boiler Disinfectors other than those mounted on lorries may be provided by the M E S under the orders of C F A

82 **Cost accounting**—(a) Installations and workshops in M E S charge are operated on a fully cost accounted basis The issue rate of electrical energy water and ice is based upon—

(i) the annual cost of maintenance and operation (*vide paras* 86 to 88),

(ii) depreciation (*vide* para 83)

(iii) interest on outlay (*vide* paras 86 to 89) at the following rates —

According to date on which operation of installation or workshop was commenced or in the case of additions and alterations when the accounts of the estimate were closed —if before 1st January 1922 rate of interest 3½ per cent from 1st January 1922 and after rate of interest 6 per cent

(iv) On costs (see para 17 and M E S Account Code)

In the case of workshops the outturn price is fixed as laid down in the M E S Account Code

(b) *The rates for electrical energy and ice are fixed by the G of I* The rates for water in cantonments are notified by the local Govt concerned in military stations other than cantonments the rates are fixed by the G of I (see para 87)

(c) The M E S will recover the cost of electrical energy water or ice supplied at the sanctioned rates from all consumers in accordance with the rules contained in paras 86 and 87 and in the M E S Account Code and subject also to the following rules

(d) *Electricity*—Meters will be provided as laid down in App F Where meters have not been provided the monthly consumption will be assessed annually by the S B C, a separate assessment being made for the punkha and non punkha season respectively

(e) *Water*—Meters will be provided for large consumers such as *Factories Shops etc Where meters are not provided the propor*tionate division of the supply amongst consumers entitled to a free supply will be assessed annually by the S B C subject to reassessment if considered necessary by the O C station

(f) *Ice* -The M E S will issue ice in bulk on payment to the I A S C, who are responsible for its distribution to units etc Ice is to be weighed at the time it is handed over to the I A S C and billed for accordingly

(g) Annual returns showing the result of the operation of each installation and workshop in the previous year will be prepared in

83 **Depreciation and Renewals**—(a) The E in C will maintain a *pro formâ* renewal account for all installations showing—

(i) ... ear,

(ii)

(iii)

(iv)

(v)

C

SECTION VI.—ELECTRICAL AND MECHANICAL.

81. Responsibilities of the M. E. S.—(*a*) The M. E. S. are responsible for the construction, upkeep and operation of Army Dept. installations, for the provision of electrical energy, water or ice, in accordance with the rules in this section. They will also provide and maintain workshops and undertake such manufacturing operations as may be necessary in connection with their duties.

(*b*) The M. E. S. may be called upon in accordance with these rules to provide, erect, maintain and operate machinery required by other services or depts. of the Army (but see clauses (*c*) and (*d*)). The M. E. S. shall also be responsible for the erection of specialist machines, if the staff maintained by the dept. is not capable of carrying out this work. The division of responsibility between the M. E. S. and the service or dept. concerned must be defined in each case, as well as the incidence of cost, in accordance with these orders.

(*c*) When a service or dept. maintains a mechanical staff for the purpose, they will be entirely responsible for the provision, upkeep, and operation of all machinery, but the M. E. S. shall be responsible for the provision, erection, maintenance and operation of the motors, engines, shafting, wiring, etc., installed in connection with the distribution of power up to specialist machines. *In the case of depts. which have a* staff competent to run the installation as a complete unit the M. E. S. are to be consulted before any plant is installed for the development of power and if considered desirable the power may be supplied by the M. E. S.

NOTES.—(i) In the case of specialist machines driven by shafting, the M. E. S. will be responsible up to the shafting driving the machine, but not for the belt itself.

(ii) In the case of machines driven by direct coupled or chain-driven electric motors, the M. E. S. will only be responsible up to the main fuzes protecting such motors.

(*d*) The M. E. S. are not responsible (except as regards the supply of power, if the particular installation is not self-contained) for the provision, maintenance or operation of machinery in the following cases:—

(i) X-ray plants: mineral water factories.

(ii) Internal combustion transport vehicles even if fitted with water filteration plants, electric generating plant or disinfectors.

(iii) Machinery used in Ordnance depôts or workshops, clothing factories, Ordnance factories, Medical store depôts, Supply depôts (including bakeries or butcheries), Dairies or Grass farms, Remount depôts, M. T. depôts or workshops, R. A. F. depôts or workshops, Marine Dept. and all machinery in regimental charge.

(iv) If so desired by any military service a C. R. E. may undertake the supervision of the operation and maintenance of specialist machinery, the expenditure being met by the service concerned.

NOTE.—To avoid duplication of staff the factory authorities may carry out works which are responsibilities of the M. E. S., and which have received administrative approval and technical sanction under M. E. S. rules, subject to all expenditure being finally adjusted against M. E. S. estimates. Similarly the M. E. S. may carry out works for the factories authorities. Such arrangements will be settled locally between the M. E. S. and factory authorities concerned.

(*e*) If the M. E. S. are required to erect or repair machinery or to supply power, they are to be consulted regarding its provision and proposed arrangement and, whenever buildings in M. E. S. charge are used as workshops, etc., the M. E. S. are to be consulted regarding the lay-out of machinery.

(*f*) The M E S are responsible for the construction of foundations for all machinery except in the case of Ordnance factories etc unless required by the M G S to undertake the duty

(*g*) The M E S are responsible for the provision erection and upkeep of all types of disinfectors other than those mounted on lorries and for the operation of high pressure steam disinfectors, and also low pressure steam disinfectors where the steam is supplied by a separate boiler Disinfectors other than those mounted on lorries may be provided by the M E S under the orders of C F A

82 **Cost accounting**—(*a*) Installations and workshops in M E S charge are operated on a fully cost accounted basis The issue rate of electrical energy water and ice is based upon—

(i) the annual cost of maintenance and operation (*vide* paras 86 to 88)

(ii) depreciation (*vide* para 83)

(iii) interest on outlay (*vide* paras 86 to 89) at the following rates —

According to date on which operation of installation or workshop was commenced or in the case of additions and alterations when the accounts of the estimate were closed —if before 1st January 1922 rate of interest 3½ per cent from 1st January 1922 and after rate of interest 6 per cent

(iv) On costs (see para 1 and M E S Account Code)

In the case of workshops the outturn price is fixed as laid down in the M E S Account Code

(*b*) The rates for electrical energy and ice are fixed by the G of I The rates for water in cantonments are notified by the local Govt concerned in military stations other than cantonments the rates are fixed by the G of I (see para 87)

(*c*) The M E S will recover the cost of electrical energy water or ice supplied at the sanctioned rates from all consumers in accordance with the rules contained in paras 86 and 87 and in the M E S Account Code and subject also to the following rules

(*d*) *Electricity*—Meters will be provided as laid down in App F Where meters have not been provided the monthly consumption will be assessed annually by the S B C a separate assessment being made for the punkha and non punkha season respectively

(*e*) *Water*—Meters will be provided for large consumers such as Factories Shops etc Where meters are not provided the proportionate division of the supply amongst consumers entitled to a free supply will be assessed annually by the S B C subject to reassessment if considered necessary by the O C station

(*f*) *Ice* The M E S will issue ice in bulk on payment to the I A S C, who are responsible for its distribution to units etc Ice is to be weighed at the time it is handed over to the I A S C and billed for accordingly

(*g*) Annual returns showing the result of the operation of each installation and workshop in the previous year will be prepared in triplicate on the appropriate I A F and will be submitted to the C R E on the 1st July They will be forwarded after check by the M E S U A to the C E through the C M A C Es will compile

83 **Depreciation and Renewals**—(*a*) The F in C will maintain a *pro formâ* renewal account for all installations showing—

(i) the depreciation charges for the year, [illegible]

[illegible]

c

SECTION VI.—ELECTRICAL AND MECHANICAL.

81. Responsibilities of the M. E. S.—(*a*) The M. E. S. are responsible for the construction, upkeep and operation of Army Dept. installations, for the provision of electrical energy, water or ice, in accordance with the rules in this section. They will also provide and maintain workshops and undertake such manufacturing operations as may be necessary in connection with their duties.

(*b*) The M. E. S. may be called upon in accordance with these rules to provide, erect, maintain and operate machinery required by other services or depts. of the Army (but see clauses (*c*) and (*d*)). The M. E. S. shall also be responsible for the erection of specialist machines, if the staff maintained by the dept. is not capable of carrying out this work. The division of responsibility between the M. E. S. and the service or dept. concerned must be defined in each case, as well as the incidence of cost, in accordance with these orders.

(*c*) When a service or dept. maintains a mechanical staff for the purpose, they will be entirely responsible for the provision, upkeep, and operation of all machinery, but the M. E. S. shall be responsible for the provision, erection, maintenance and operation of the motors, engines, shafting, wiring, etc., installed in connection with the distribution of power up to specialist machines. In the case of depts. which have a staff competent to run the installation as a complete unit the M. E. S. are to be consulted before any plant is installed for the development of power and if considered desirable the power may be supplied by the M. E. S.

NOTES.—(i) In the case of specialist machines driven by shafting, the M. E. S. will be responsible up to the shafting driving the machine, *but not for the belt itself.*

(ii) In the case of machines driven by direct coupled or chain-driven electric motors, the M. E. S. will only be responsible up to the main fuzes protecting such motors.

(*d*) The M. E. S. are not responsible (except as regards the supply of power, if the particular installation is not self-contained) for the provision, maintenance or operation of machinery in the following cases:—

(i) X-ray plants: mineral water factories.

(ii) Internal combustion transport vehicles even if fitted with water filteration plants, electric generating plant or disinfectors.

(iii) Machinery used in Ordnance depôts or workshops, clothing factories, Ordnance factories, Medical store depôts, Supply depôts (including bakeries or butcheries), Dairies or Grass farms, Remount depôts, M. T. depôts or workshops, R. A. F. depôts or workshops, Marine Dept. and all machinery in regimental charge.

(iv) If so desired by any military service a C. R. E. may undertake the supervision of the operation and maintenance of specialist machinery, the expenditure being met by the service concerned.

NOTE.—To avoid duplication of staff the factory authorities may carry out works which are responsibilities of the M. E. S., and which have received administrative approval and technical sanction under M. E. S. rules, subject to all expenditure being finally adjusted against M. E. S. estimates. Similarly the M. E. S. may carry out works for the factories authorities. Such arrangements will be settled locally between the M. E. S. and factory authorities concerned.

(*e*) If the M. E. S. are required to erect or repair machinery or to supply power, they are to be consulted regarding its provision and proposed arrangement and, whenever buildings in M. E. S. charge are used as workshops, etc., the M. E. S. are to be consulted regarding the lay-out of machinery.

(*f*) The M E S are responsible for the construction of foundations for all machinery except in the case of Ordnance factories etc unless required by the M G S to undertake the duty

(*g*) The M E S are responsible for the provision erection and upkeep of all types of disinfectors other than those mounted on lorries and for the operation of high pressure steam disinfectors and also low pressure steam disinfectors where the steam is supplied by a separate boiler Disinfectors other than those mounted on lorries may be provided by the M E S under the orders of C F A

82 **Cost accounting** —(*a*) Installations and workshops in M F S charge are operated on a fully cost accounted basis The issue rate of electrical energy water and ice is based upon—

(i) the annual cost of maintenance and operation (*vide* paras 86 to 88)

(ii) depreciation (*vide* para 83)

(iii) interest on outlay (*vide* paras 86 to 89) at the following rates —

According to date on which operation of installation or workshop was commenced or in the case of additions and alterations when the accounts of the estimate were closed —if before 1st January 1922 rate of interest 3½ per cent from 1st January 1922 and after rate of interest 6 per cent

(iv) On costs (see para 17 and M E S Account Code)

In the case of workshops the outturn price is fixed as laid down in the M E S Account Code

(*b*) The rates for electrical energy and ice are fixed by the G of I The rates for water in cantonments are notified by the local Govt concerned in military stations other than cantonments the rates are fixed by the G of I (see para 87)

(*c*) The M E S will recover the cost of electrical energy water or ice supplied at the sanctioned rates from all consumers in accordance with the rules contained in paras 86 and 87 and in the M E S Account Code and subject also to the following rules

(*d*) *Electricity* —Meters will be provided as laid down in App F Where meters have not been provided the monthly consumption will be assessed annually by the S B C a separate assessment being made for the punkha and non punkha season respectively

(*e*) *Water* —Meters will be provided for large consumers such as Factories Shops etc Where meters are not provided the proportionate division of the supply amongst consumers entitled to a free supply will be assessed annually by the S B C subject to reassessment if considered necessary by the O C station

(*f*) *Ice* The M E S will issue ice in bulk on payment to the I A S C, who are responsible for its distribution to units etc Ice is to be weighed at the time it is handed over to the I A S C and billed for accordingly

(*g*) Annual returns showing the result of the operation of each installation and workshop in the previous year will be prepared in

83 **Depreciation and Renewals** —(*a*) The E in C will maintain a *pro forma* renewal account for all installations showing—

ear,

SECTION VI.—ELECTRICAL AND MECHANICAL.

81. Responsibilities of the M. E. S.—(*a*) The M. E. S. are responsible for the construction, upkeep and operation of Army Dept. installations, for the provision of electrical energy, water or ice, in accordance with the rules in this section. They will also provide and maintain workshops and undertake such manufacturing operations as may be necessary in connection with their duties.

(*b*) The M. E. S. may be called upon in accordance with these rules to provide, erect, maintain and operate machinery required by other services or depts. of the Army (but see clauses (*c*) and (*d*)). The M. E. S. shall also be responsible for the erection of specialist machines, if the staff maintained by the dept. is not capable of carrying out this work. The division of responsibility between the M. E. S. and the service or dept. concerned must be defined in each case, as well as the incidence of cost, in accordance with these orders.

(*c*) When a service or dept. maintains a mechanical staff for the purpose, they will be entirely responsible for the provision, upkeep, and operation of all machinery, but the M. E. S. shall be responsible for the provision, erection, maintenance and operation of the motors, engines, shafting, wiring, etc., installed in connection with the distribution of power up to specialist machines. In the case of depts. which have a staff competent to run the installation as a complete unit the M. E. S. are to be consulted before any plant is installed for the development of power and if considered desirable the power may be supplied by the M. E. S.

NOTES.—(i) In the case of specialist machines driven by shafting, the M. E. S. will be responsible up to the shafting driving the machine, but not for the belt itself.

(ii) In the case of machines driven by direct coupled or chain-driven electric motors, the M. E. S. will only be responsible up to the main fuzes protecting such motors.

(*d*) The M. E. S. are not responsible (except as regards the supply of power, if the particular installation is not self-contained) for the provision, maintenance or operation of machinery in the following cases:—

(i) X-ray plants: mineral water factories.

(ii) Internal combustion transport vehicles even if fitted with water filteration plants, electric generating plant or disinfectors.

(iii) Machinery used in Ordnance depôts or workshops, clothing factories, Ordnance factories, Medical store depôts, Supply depôts (including bakeries or butcheries), Dairies or Grass farms, Remount depôts, M. T. depôts or workshops, R. A. F. depôts or workshops, Marine Dept. and all machinery in regimental charge.

(iv) If so desired by any military service a C. R. E. may undertake the supervision of the operation and maintenance of specialist machinery, the expenditure being met by the service concerned.

NOTE.—To avoid duplication of staff the factory authorities may carry out works which are responsibilities of the M. E. S., and which have received administrative approval and technical sanction under M. E. S. rules, subject to all expenditure being finally adjusted against M. E. S. estimates. Similarly the M. E. S. may carry out works for the factories authorities. Such arrangements will be settled locally between the M. E. S. and factory authorities concerned.

(*e*) If the M. E. S. are required to erect or repair machinery or to supply power, they are to be consulted regarding its provision and proposed arrangement and, whenever buildings in M. E. S. charge are used as workshops, etc., the M. E. S. are to be consulted regarding the lay-out of machinery.

(e) The write off of abnormal damages or loss by C F A should not be sanctioned except in cases where claims become irrecoverable if so written off the loss or damage will be adjusted against the administration budget head concerned

86 **Electrical Supplies** —Rules regarding M E S Electrical Supplies are contained in Appendix F

(a) (i) Whether the supply of electrical energy is obtained by the M E S from an outside source or generated by them at a power station, they will be responsible for the complete installation, all expenditure incurred, including internal wiring and fittings in those military buildings for which the M E S are responsible, will be a charge against 50 M E S

(ii) Where a distributed supply of electrical energy from a private compan[illegible] nly of a cantonment, (the co[illegible] undertaken by the M E[illegible] ties of watching the consum[illegible] eping in touch with the com[illegible] ely assigned to some respons[illegible] the bills supplied by the com[illegible] the charge for electrical e[illegible] inistrative arrangements [illegible] officer responsible is the C R E the charge will be adjusted against 50-M E S, subsequent recoveries being credited to revenue If he be a R A F, regimental, I A S C, Ordnance Departmental or any other Military officer the charge will be adjusted against the appropriate grant under 48 Army

(iii) (1) Where an electric supply is provided by a technical military dept in connection with the operation of its own factory plant the dept concerned will be responsible for the complete installation (including both external and internal wiring and fittings) within the factory area except as regards services and buildings for which the M E S are responsible under special orders

(2) The [illegible] le for the distri[illegible] o quarters, etc, [illegible] ts as have been [illegible] and for recovery [illegible] The M E S [illegible] ring cost of in[illegible] to the Military [illegible] recovery of rent for electrical installations in such quarters

(3) The initial and recurring cost of distribution of electricity to buildings (Govt or private) which do not form part of a factory or its residential area referred to above will be dealt with by the M E S who will take over a supply in bulk at a certain point or points under an arrangement as regards rate per unit, etc (see clause (b))

(4) Where however the [illegible]

[illegible] such installations

Such arrangements will be subject to revision if the complete electrification of the station is undertaken by the M E S

(*b*) The rate of depreciation for each class of plant or material forming part of an installation or workshop will be fixed by the E.-in-C. as a percentage rate on the capital cost based on the estimated life in each case.

(*c*) The distribution of the grant for renewals will be made by the E.-in-C. in the budget, a special grant being made for any renewal estimated to cost more than Rs. 10,000 and a lump sum grant to Commands for renewals estimated to cost up to Rs. 10,000. Commands will allot lump sums to districts for renewals estimated to cost up to Rs. 3,000, which may be sanctioned by the C. R. E.: renewals estimated to cost between Rs. 3,000 and Rs. 10,000 require the sanction of the C. E., and if over Rs. 10,000 of the E.-in-C. Funds may not be re-appropriated from or to the renewals sub-head, without the prior concurrence of the E.-in-C. (see also Section III).

(*d*) Estimates for renewals, which also involve extensions, should be divided into two portions, showing—

(i) Renewals proper, *i.e.*, replacements of existing buildings, plant, etc

(ii) Extensions.

(i) is chargeable to the sub-head renewals of head C " Maintenance and Operation of Installations ", (ii) is chargeable to head A " Works " and the administrative approval of C. F. A. is required as well as an allotment of funds under head A " Works."

84. Estimates.—(*a*) *E. and M. installations and workshops.* The orders given in para. 62 regarding approximate, abstract and detailed estimates apply equally to E. & M. estimates. Estimates for buildings included in an abstract estimate will be prepared on a plinth area basis.

(*b*) E. & M. items included in estimates for buildings, etc.—

(i) *Water supply.*—The sub-head must be divided into two parts (*a*) Internal connections and fittings, (*b*) External connections and supply works (if any), as the former is ultimately included in the capital cost of the building and the latter in that of the main water supply installation of the station. In the cases where an existing source of supply is not being used, or water is to be pumped, or special storage is required or if the cost of internal connections exceeds 3 per cent. of the total estimate, full details and reasons in support are to be given.

(ii) *Electrical.*—The sub-head will be divided into (*a*) External work, (*b*) Internal work, according to the sub-division laid down in para. 86.

If an existing source of supply is not to be utilised or any departure from authorised scales is proposed, full details and reasons in support are to be given.

85. Replacements and damages.—(*a*) The replacement or repair of water, sanitary and electric fittings, wiring, etc., will be classified by the local M. E. S. as " fair wear and tear " or " abnormal damages or loss."

(*b*) Fair wear and tear will include replacement of fuzes and such electric bulbs as are, in the opinion of the local M. E. S. officer, worn out by ordinary use and are not broken through accidents caused by the occupant or occupants, normal repairs to, and renewals of, switches, internal wiring, fans, piping, taps, water and sanitary fittings, etc.

(*c*) Abnormal damages or loss will include renewal of, or repairs to, the items under (*b*) above and including electric bulbs mentioned above, due to negligence of the occupants.

(*d*) The cost of the repairs and renewals will be charged in case of (i) fair wear and tear to " 50-M. E. S.", (ii) abnormal damages or loss to the occupants as barrack damages.

it appears that the total monthly consumption is likely to be less than Rs 10 in value —

Lamp wattage	Rate per lamp used for internal lighting			Rate per lamp used for outside lighting		
	Rs	A	P	Rs	A	P
20	1	2	0	1	11	0
30	1	11	0	2	8	6
40	2	4	0	3	6	0
50	2	13	0	4	3	6
75	4	3	0	6	5	3
100	5	10	0	8	7	0

NOTE —Each connection must be approved by the C R E, subject to no expense to the State in extending the mains being incurred, to sufficient power being available and to execution of an informal agreement undertaking that payments will be made monthly in advance

(ii) When a supply of current is made in bulk or for street-lighting at special rates, according to the circumstances of each case, a formal legal agreement (or proposals in the case of supply to a Govt dept) will be submitted to the G of I for approval

(iii) In Hostels (see para 50)

(*f*) (i) The following charges will be levied, in addition to the rent of the building, where an electric installation has been erected by the State in a Military building including hired buildings or where fans have been let on hire —

For rent of internal wiring and fittings per month on the capital cost . 5/6 per cent

For each ceiling fan let out on hire per month or part of a month . Rs 5

(ii) In calculating the capital cost of an internal installation the following rules are to be observed —

(1) Normally the internal installation includes everything beyond *the meter, up to which (inclusive) is part of the distribution* system

(2) When there is no meter and the installation is connected to the M E S supply mains the internal installation will be considered to commence on the consumer's side of the main switch controlling the supply to the building

(3) When the installation is connected to a distributed supply system not in M E S charge, the capital cost will include that portion, if any, of the supply line or distributor paid for by Govt , unless the cost thereof is entered under rule in the capital account register of external wiring

87. Water Supplies —Rules governing M E S Water Supplies are contained in Appendix G

(*a*) Water supplies are authorised works and may be carried out subject to para 23 and the usual financial rules without reference to the G of I provided—

(i) th [illegible] a supply from a municirity, etc , or another [illegible] l agreement or propo- [illegible] with para 86,

(ii) that the supply of water is limited to normal requirements,

(iii) that the scheme is not for irrigation water supply, such projects are unauthorised

(b) Electrical installations in connection with authorised services in various buildings are authorised works subject to the conditions specified in clause (c) and in para. 23 and to the usual financial rules, provided that the scales of lighting, heating and ventilation as authorised in App. F. are not exceeded. When a scheme entails taking a supply from a municipality, company, etc., a formal agreement must be submitted for the previous approval of the G. of I. When the supply is to be taken by the M. E. S. from a Govt. dept., the proposed arrangements will be submitted for the previous approval of the G. of I.

(c) Any proposal for partial electrification of a station where power is to be obtained from an outside source must be submitted to the G. of I. for consideration, together with a brief report which must clearly bring out the following points:—

(i) Source of supply of power.

(ii) If a private company, whether the company has had a license granted to supply in the area concerned.

(iii) Whether a distribution system already exists; if not whether the company will provide it without expense to the State.

(iv) Rate per unit.

(v) Estimated cost of the internal wiring to be done and approximate proportion to the cost of electrifying the whole station.

(vi) Whether it is considered that a distribution system by the company will be cheaper than a complete M. E. S. installation or a M. E. S. distribution system when complete electrification is approved (brief particulars to be given).

(vii) Whether the company is prepared to consider reduced rates on a guaranteed minimum consumption when complete electrification is taken up (brief particulars to be given).

These conditions are imposed in order that the G. of I. may not be committed to taking a distributed supply from an outside source in cases in which complete electrification of a station is likely to be considered.

Once the approval of the G. of I. has been given, wiring, etc., may be carried out locally under the usual rules when funds are available.

(d) Recoveries for a distributed supply of electric current will be made throughout India at the following rates, except—

(i) where special rates have been sanctioned by the G. of I. (see clause (c));

(ii) where a distributed supply is taken from a company, corporation, etc., and paid for by the consumers concerned other than through the agency of the M. E. S. to the company, corporation, etc.;

(iii) where flat rates for an unmetered supply are authorised (see clause (e)).

	As.	P.
Per B. O. T. unit of electricity for domestic purposes .	6	0
Per B. O. T. unit of electricity for power purposes on a restricted hour basis	3	6
Per B. O. T. unit of electricity for power purposes, on an unrestricted hour basis	4	6
Per B. O. T. unit of electricity for street-lighting . .	4	6

NOTE.—Each connection for the supply of energy for power purposes during unrestricted hours must be approved by the C. E., who will satisfy himself that sufficient energy is available and that the supply will not necessitate the provision of additional plant.

(e) The exceptions referred to in clauses (d) (i) and (iii) above are:—

(i) Small lighting connections to private consumers when the installation of separate meters would be uneconomical. The following flat rates shall be charged per lamp per month if

it appears that the total monthly consumption is likely to be less than Rs 10 in value —

Lamp wattage	Rate per lamp used for internal lighting			Rate per lamp used for outside lighting		
	Rs	A	P	Rs	A	P
20	1	2	0	1	11	0
30	1	11	0	2	8	6
40	2	4	0	3	6	0
50	2	13	0	4	3	6
75	4	3	0	6	[illegible]	3
100		10	0	8	[illegible]	0

NOTE —Each connection must be approved by the C R E subject to no expense to the State in extending the mains being incurred to sufficient power being available and to execution of an informal agreement undertaking that payments will be made monthly in advance

(ii) When a supply of current is made in bulk or for street-lighting at special rates, according to the circumstances of each case a formal legal agreement (or proposals in the case of supply to a Govt dept) will be submitted to the G of I for approval

(iii) In Hostels (see para 50)

(*f*) (i) The following charges will be levied in addition to the rent of the building where an electric installation has been erected by the State in a Military building including hired buildings or where fans have been let on hire —

For rent of internal wiring and fittings per month on the capital cost — 5/6 per cent

For each ceiling fan let out on hire per month or part of a month — Rs 5

(ii) In calculating the capital cost of an internal installation the following rules are to be observed —

(1) Normally the internal installation includes everything beyond the meter, up to which (inclusive) is part of the distribution system

(2) When there is no meter and the installation is connected to the M E S supply mains the internal installation will be considered to commence on the consumer s side of the main switch controlling the supply to the building

(3) When the installation is connected to a distributed supply system not in M E S charge the capital cost will include that portion if any of the supply line or distributor paid for by Govt unless the cost thereof is entered under rule in the capital account register of external wiring

87 Water Supplies—Rules governing M E S Water Supplies are contained in Appendix G

(*a*) Water supplies are authorised works and may be carried out subject to para 23 and the usual financial rules without reference to the G of I provided—

(i) t a supply from a muni rity, etc , or another l agreement or proj o- with para 86,

(ii) that the supply of water is limited to normal requirements

(iii) that the scheme is not for irrigation water supply, such projects are unauthorised

(*b*) The incidence of cost and the responsibility of the M. E. S. as regards military water supplies are as under:—

(i) The initial and recurring expenditure on work undertaken in connection with water supplied for military purposes, including expenditure on construction and maintaining wells, installing pumps and operating mechanical pumping plant, etc., will be debitable to Head 50-M. E. S.

(ii) The cost of drawing water from springs and wells by animal or coolie labour, and its subsequent distribution (other than by pipes) by I. A. S. C. or regimentally, is debitable to Head 48-Army; also the cost of the distribution (other than by pipes) of the distilled water condensed by the M. E. S. or other agency.

(iii) In special cases, where water is purchased from port trusts, municipalities, etc., and delivered into tanks or reservoirs from port trust water barges or otherwise, if the distribution is made from such tanks direct to units by hand or by transport, payment for water will be made direct by an officer to be detailed by the G. O. C. District and the incidence of cost will follow the administrative arrangements. If, however, the water, after being received in these tanks or reservoirs, is pumped to other tanks or reservoirs, or if a distributed piped supply is given from any of the above mentioned tanks or reservoirs, the expenditure will be debited to Head 50-M. E. S.; except the cost of ultimate distribution, if otherwise than piped supply, which will be debited to Head 48-Army.

(iv) In cases where a distributed piped supply of water is obtained from a municipality or other local body or a Govt. dept., the distribution will be dealt with by the M. E. S. and the cost of water supplied to military buildings or for military purposes (whether recoveries are made by a tax levied on buildings or by house meter measurements) will be debited to Head 50-M. E. S.

In small stations, where water is supplied by a municipality, etc., by house meter measurements only, payment for water will be made direct by the unit or formation concerned.

(v) In cases where water is purchased in bulk from a local body and where the M. E. S. maintain a distribution system, the cost of the water will be debited to Head 50-M. E. S.

(vi) Charges connected with water supply for troops on the line of march and in training camps (other than at camping grounds in charge of the M. E. S.) are not debitable to Head 50-M. E. S.

(vii) In all cases the adjustments against the heads concerned are subject to recoveries of any sums due from consumers.

(*c*) In cantonments and all places where a system of public water supply of any nature has been installed all water consumed will be paid for in accordance with the rules on the subject.

(*d*) Any proposals from the military authorities regarding new taxation in cantonments in connection with a M. E. S. water supply will be forwarded to the Q. M. G. for consideration before submission to the Cantonment Authority concerned (see para. 82 and App. G.).

(*e*) In stations other than cantonments, a schedule of rates for the supply of water will be prepared under the orders of the G. O. C. District *vide* App. G. These rates will not be authoritative until sanctioned by the G. of I.

88. Ice Factories.—(*a*) The previous sanction of the G. of I. is necessary to the establishment of an Ice Factory. All expenditure, both initial and recurring will be charged against 50-M. E. S.

(*b*) Ice made in M. E. S. ice factories will be handed over in bulk to the I. A. S. C. who will be responsible for its retail issue.

(c) The M E S will charge the I A S C at the rate of pies 10 a lb for all ... o charged will be credited to the all India cost of produc ... nent of ice factories of the ... l returns (The I A S C issue rate is separately fixed by the G of I)

(d) In view of the fact that very heavy expense is incurred in working an ice plant intermittently to produce small quantities of ice all M E S ice factories will be closed at the end of each hot weather and will not be reopened for the issue of ice until the beginning of the next hot weather

(e) The dates of closing and opening will be decided by the G O C District in each case Generally speaking it will be economical to close down the plant as soon as the regular daily demand for ice from the plant falls below one quarter of its full daily capacity Two weeks' notice should be given before closing down and the staff should be available for reopening on any date after the 1st of April each year

(f) The initial outlay will be the total capital expenditure incurred on the complete installation including buildings ice plant machinery ice stores water and electrical connections and cooling towers also quarters for staff etc All additions and alterations in the nature of *capital expenditure are to be adjusted against the capital account*

(g) The cost of materials at site will be booked against the annual maintenance and operation estimates also the following maintenance and operation expenses —

- (i) Salaries and wages of all personnel solely employed in the ice factory
- (ii) The cost of all materials used (*e g* fuel oil ammonia calcium chloride) also of electrical energy and water
- (iii) The cost of upkeep (*e g* repairs to buildings ice plant machinery ice stores water and electrical connections cooling towers and quarters for staff)
- (iv) On costs (see para 17 and M E S Account Code)

NOTE —The cost of renewals to buildings plant etc will be dealt with in accordance with the orders in para 83

89 **Workshops** —(a) The word Workshops as herein used is defined as those workshops which the C E in consultation with C M A has decided are of sufficient importance to necessitate accounts to be kept under the sub head "Workshops" It does not refer to sub divisional or installation workshops

(b) All expenditure both initial and recurring will be charged against 50-M E S The construction of a workshop as defined above requires the sanction of the G of I

(c) Workshops are established for the manufacture and repair of articles required by the M E S Work may also be undertaken for other Govt depts or for private persons subject to recoveries being made for the full cost plus such additional percentage charges as may be prescribed from time to time

No work should be undertaken for municipalities the Cantonment Authority, etc or non Govt bodies or private individuals before the whole estimated cost, including all charges for supervision, profit, etc, which may be leviable under the rules for the time being in force, has been paid into a Govt Treasury

(d) Each workshop is to be self-supporting *i e*, recoveries for work done are to cover the whole of the workshop expenditure including

interest on capital outlay and depreciation. The C. E. will fix from time to time the percentages to be added for new work and for repairs respectively on account of labour and materials. In all cases recoveries will be made for work done in the workshop including work done for the M. E. S.

(*e*) The procedure as regards prepaiation and sanction of estimates and putting a job of work in hand is contained in the M. E. S. Account Code. If the C. E. considers it desirable in case of large workshops to keep separate records for the different shops, he will issue orders to C. R. E. who, in consultation with the C. M. A., will decide the extent to which the accounts are to be amplified.

(*f*) The initial outlay will be the total capital expenditure incurred on the workshops including buildings, power plant, shafting, tools (see M. E. S. Account Code), fittings, plant and machines for the various shops, water and electrical connections, also quarters for staff, etc.

All additions and alterations of the nature of capital expenditure are to be included in the capital account.

(*g*) The workshop expenditure referred to in clause (*d*) includes "Oncosts" as well items of the following nature:—

(i) Salaries and wages of all personnel, labour, etc., engaged solely in the working of the shops.

(ii) All materials (*e.g.*, fuel, oil, sand for foundry, wood for patterns) used in the operation of the workshop; also charges for electrical energy and water.

(iii) The cost of upkeep (*e.g.*, repairs to buildings, power plant, shafting, tools, fittings, plant, machines for the various shops, water and electrical connections and quarters for staff).

NOTE.—The cost of renewals to buildings, plant, etc., will be dealt with in accordance with the orders in para. 83.

90. Technical Inspection of Defence Electric Light Sections.—Technical inspection of the plant and accessories at defence electric light stations will be carried out as required, at least once annually by the S. O. R. E. (E. & M.) the Command concerned.

The general administration and technical report will be submitted annually to the G. O. C. by the 31st of March on I. A. F. K. 2408 M. The report will be forwarded through the E.-in-C. to the C. G. S.

SECTION VII —FURNITURE AND STORES.

101. Barrack & Hospital Furniture —(*a*) The cost of the initial supply and upkeep of furniture supplied by the M E S for the Army is debitable to 50 M E S

(*b*) Lists of articles of M E S supply and their approved scales are given in Barrack and Hospital Schedules (India) and A T Medical

(*d*) Appendix H contains a complete list of articles of furniture of M E S supply, the general dimensions approved by the G of I and references to general dimensions drawings which have been approved or to types to be supplied

Appendix I contains a list, and orders regarding the type, of other articles which the M E S supply as expendible stores or as fixtures, *as distinct from those articles provided as fixtures according to the scales in Barrack Synopsis*

(*e*) A register of authorised furniture (see M E S Account Code) will be maintained for each sub-division Deficiencies will be provided only as funds permit Without the previous sanction of the G of I authorised scales of furniture will not be exceeded except as provided below

(*f*) The M E S will maintain at each station certain percentage reserves of furniture above the authorised scales as prescribed in Appendix J The G O C District may, in an emergency, authorise the issue from reserves, if available of articles of furniture on loan in excess of scale for purely temporary purposes

(*g*) Furniture allotted to units, depots, etc, is for use in the sets of lines, buildings, etc, occupied by the units, depots, etc, at the time of issue Such furniture may not be transferred permanently or temporarily to other sets of lines or buildings in the station or outside the station even if occupied by the unit, etc, without the prior consent of the G E

(*h*) The M E S are responsible for arranging for the carriage to barracks, etc, of furniture to complete scales prior to handing over buildings or sets of lines to units, etc Units, depots, etc, concerned are responsible for providing carriage for all subsequent demands for and exchange of furniture, except that in the case of offices hostels, hospitals, officers, lady nurses and departmental W Os and N C Os quarters, etc, where no transport is on charge, the cost of the carriage of furniture will be paid by the M E S

In the hills the carriage of furniture in all cases shall be undertaken by military fatigue parties

(*i*) The following instructions should be followed when supplying furniture to camps —

(i) For temporary camps the issue of barrack furniture is not authorised [illegible]
temporar
if owing
the use c

(ii) When troops move from barracks into emergency camps, such as cholera camps, etc, there is no objection to their using in camp under the orders of the O C station the furniture supplied to the barracks provided that no furniture is removed from infected barracks and that no expense to the State is caused by moving the furniture

If considered absolutely necessary by the medical authorities, charpoys may be supplied, under the orders of the O C station (or C F A, if expenditure is involved) for the men

in camps whose bedcots or charpoys have been left in an infected building. Any infected bedcots or charpoys will be disinfected or destroyed under the direction of the medical authorities.

(j) The cost of repairs to, and replacements of furniture will be adjusted in accordance with the rules in para. 85.

(k) The initial supply of furniture required to complete authorised scales *on the introduction* of new items or owing to increases of scales is an authorised work.

(l) All furniture will be made up on annual or special estimates which must be sanctioned by C. F. A. The procedure to be followed is contained in the M. E. S. Account Code.

(m) *An annual verification of the furniture in charge of units, corps, or departments will be made by the officers who make the quarterly barrack inspections, in accordance with the rules laid down for stock-taking in the M. E. S. Account Code. An officer or S. D. O. will also be deputed to count the furniture in store, to verify the ledger, and to report any deficiencies or surpluses.* From the ledgers thus checked and verified or corrected the Annual Furniture Distribution Return will be compiled.

(n) The supply of furniture on payment of rent has been authorised in certain special cases by the G. of I. In such cases rent will be recovered monthly at the rate of 10 per cent. per annum on the initial cost of furniture in addition to the rent for quarters.

(o) *In cases referred to in clause (n)* the M. E. S. will be responsible for the provision and repair of authorised furniture and equipment including articles which are ordinarily supplied by the I. A. O. C.

(p) The M. E. S. are responsible for the supply and maintenance of furniture for the R. A. F., including technical furniture. Except as regards technical furniture, the scales authorised for corresponding ranks of the Army are applicable.

(q) In order to facilitate the checking and preparing of estimates a Furniture Rate List will be maintained in each district. This list will show the cost of making up each article of furniture at all stations where the local manufacture of furniture is permitted.

A corrected copy of the Rate List will be forwarded annually on the 1st of July to the C. E. concerned and to the E.-in-C. who will return the old copies to the C. R. E.

(r) The *furniture sub-head in accommodation* estimates will be prepared in the following way:—

As per authorized scale—B. & H. Schedule No.

Sets............@ Rs............a set=Rs............

Less value of articles available locally—Rs............

Nett estimate—Rs............

If, however, no authorised scale exists or it is desired to provide articles in excess of the authorised scale, full details and reasons in support of the inclusion of these articles must be given.

102. Stores.—(a) Financial powers and rules regarding the supply of stores are given in A. R. I., Volume III, (see also para. 24). The procedure as regards accounting for stores is laid down in the M. E. S. Account Code. The M. E. S. are also governed by the general rules as regards stores given in A. R. I., Volume II, except in any case in which they conflict with rules prescribed in the M. E. S. Account Code or in this volume.

(b) The stock limit of the M. E. S. as a whole as fixed from time to time by the G. of I. is not to be exceeded. The stock limits of Commands and Districts within the total limit fixed by the G. of I. will be determined by the E.-in-C. and C. Es. of Commands respectively.

103. Tools and Plant.—(a) All new mathematical, drawing and survey instruments will be obtained from and old instruments repaired by the Mathematical Instrument Department, Calcutta.

(b) Tools and plant may be issued on hire under the orders of the C R E The hirer will be responsible for all incidental expenses and for any damage, which is not due to fair wear and tear

tools and plant
E S Account
which requires

r
e

M E S

(b) (i) Transport may be demanded by time or on maund mileage or cubic foot mileage rates including or excluding loading and unloading as required

(ii) *Local transport officers, if unable to supply transport of the* particular type demanded by the M E S will obtain the previous concurrence of those authorities before supplying alternative transport

(iii) The cost of transport (animal or mechanical) services rendered by the I A S C to the M E S will be either the actual cost of hired transport supplied or, where Govt transport is supplied, the charges will be based on the local market rates, or local contract rates where such exist, for hired transport of a class similar to the Govt transport supplied to the M E S The assessment will be made by the local transport officer

(iv) Indents for transport must be accompanied by a certificate that funds are available to pay for the transport required and should be endorsed in red ink ' Debitable to 50-M E S "

(v) Demands for motor cars required in connection with works will be made by the C R E on the G O C District who will, if possible arrange for the allotment of a staff car

(c) In special cases, the M E S may be permitted to purchase and maintain their own transport (steam or internal combustion), subject to rules in para 24 All such transport will be borne on charge as Tools and Plant

(d) The orders in sub para (a) above are not intended to preclude the M E S from entering into contracts for works for which the contractor arranges his own transport, and when it is undesirable to force him to use Govt transport

(e) The M E S shall be free to enter into separate contracts for the transportation of machinery and such other special articles as the A D S & T and M E S officer concerned mutually decide

APPENDICES.

APPENDIX A.

(Referred to in para. 11.)

M. E. S. ESTABLISHMENTS.

Part I. Officers.

Rank.	Grade.	[illegible]					Total.	Remarks.
		A. H. Q.	[illegible]	[illegible]	[illegible]	[illegible]		
Major-Genl.	Engineer-in-Chief	1	.	.	.	.	1	
Col. Comdt. [illegible]	Chief Engineer	.	1	1	1	1	4	1 N. W. F. [illegible] to A. G. G., Baluchistan.
Colonel	Deputy Engineer-in-Chief (Works)	1	.	.	.	.	1	
	Deputy Engineer-in-Chief (L. A. M.)	1	.	.	..	..	1	
	Deputy Chief Engineer	.	1	.		..	1	Also Secy. to C. C., N.-W. F. P., at Peshawar.
Lt.-Col.	C. R. E., 1st class	.	1	6	2	1	10	Waziristan, Peshawar, Rawalpindi, Lahore, Central Provinces, Poona, Madras, United Provinces, Presidency and Baluchistan districts.
Lt.-Col. or Major	S. O. R. E., 1st grade (Works)	1	1	1	1	1	5	At A. H. Q. and Command H. Q.
	S. O. R. E., 1st grade (L. A. M.)	.	1	..	1	..	2	At Command H. Q.
	C. R. E., 2nd class	..	1	2	3	2	8	Kohat, Bombay, Aden, Delhi, Allahabad, Burma, Sind, Rajputana and Zhob districts.

Major or Captain	A C R E (Works)		6	3	2	1	12	For each C R. E. 1st class and for Civil Works in Waziristan and Peshawar districts.
	" (E & M)		2		1		3	For Peshawar Lahore and United Provinces districts
	" (Park)		1				1	At Lahore
	S O R E 2nd grade (Works)		2				2	For Command H Q and Deputy C E
	" 2nd grade (E & M)			1		1	2	At Command H Q
Major Capt or Lt	G E or A G E (Works)		38	19	18	10	85	Allocated to districts by Command H Q and to stations by District H Q
	" (E & M)		12	5	4	2	23	
Capt or Lt	Technical Officer (Works)	1	1	1	1	1	5	At A H Q and Command H Q
	" (E & M)	1					1	
Civilian or A I R L M	Special Officer (E & M)		1				1	At Command H Q
Major Capt or Lt	Barrack Dept Officers		3	1	1	1	6	Allocated to districts by Command H Q
Civilian or I M I Officer	Officer Supervisor	1					1	
	TOTALS AT DUTY	7	75	37	35	21	175	
	Reserve for furlough courses etc						31	
	Total cadre chargeable to grant for Establishment						206	

NOTES—1 The E in C is empowered to vary the distribution between Commands of the numbers of G Es A G Es and Barrack Department Officers to vary the proportions of G Es and A G Es between Works and E and M and by altering the numbers of G Es and A G Es to modify the number shown as Reserve

2 The composition of the establishment is as follows —

(a) Regular R E officers and officers of the R E (Indian Army)

(b) A I R E M of ranks and numbers as may be sanctioned

(c) Departmental officers of the Military Engineering Establishment numbers and ranks are determined as indicated in the Notes to Part II of this appendix

(d) Departmental officers of the Barrack Department numbers and ranks are determined as indicated in Part II of this appendix

(e) Civilians 3 Assistant Engineers are appointed by the A G from the cadre of Civilian S D Os Such permanent or temporary officers as may be sanctioned

3 Exclusive of such officers whose pay under the orders of the Government of India (or the Secretary of State if necessary) is chargeable to estimates for works the total cadre of officers must not exceed 206

4 The distribution given above does not constitute the basis for scale audit by commands

APPENDIX A—*contd.*

Part II.—Engineering Establishment and Furniture and Stores Branch.

Grade.	N. C.	S. C.	E. C.	W. C.	Total.	Remarks.
Buildings and Roads Branch.						
Military S. D. Os.	32 3	21 2	21 2	8 1	90*	Scale audit will be conducted against the total numbers.
Civilian S D. Os.	36	13	12	9	70	
Sub-overseers—						
1st grade (Civ.)	37	19	18	9	83	
2nd grade (Civ.)	73	38	37	19	167	All these establishments are allocated to districts by Command H. Q. and to stations by C. R. Es. of districts.
Electrical and Mechanical Branch.						
Military S. D. Os.	11 1	8 1	7 1	3 ..	35	
Civilian S. D. Os.	..	..	..	..	..	In the case of Military Establishments, the upper number represents numbers at duty and the lower number the reserve for furlough, which is calculated at 10 per cent. of the numbers ordinarily at duty.

Furniture and Stores Branch						
Barrack Department—						
Barrackmasters (Conductors)					13	In the case of Military Establishments, the upper number represents numbers at duty and the lower number the reserve for furlough which is calculated at 10 per *cent* of the numbers ordinarily at duty
Assistant Barrackmasters (Sub Conductors)	30	24	25	7	24	
Barrack Serjeants (Staff Serjeants and Serjeants)	4	[illegible]	2	1	14	
Storekeepers—						
Upper Division (Civilians)	9	4	4	3	20	
Lower Division (Civilians)	10	9	9	6	40	

NOTES —1 Provided that the total establishments are not exceeded the E in C may make the following variations —

between leave reserve and numbers at duty
between numbers allotted to Commands
between numbers of Military and Civilian S D Os
between numbers of S D Os in the *Buildings and Roads* and E. & M branches

2 *All military* S D Os *of the Buildings* and Roads Branch and all military S D Os (*other than military mechanists*) of the E & M branch belong to the Military Engineering Establishment I U L)

3 The ranks of the members (including officers) of the Military Engineering Establishment and of the Barrack Department are separately regulated as follows —

⅕ *of the* fixed cadre' are officers and *W Os in the proportion of* 1 to 6 Of the officers ⅓ are Commissaries (Majors) ⅓ are Deputy Commissaries (Captains) and
⅓ are Assistant Commissaries (Lieutenants) Of the W Os $\frac{4}{11}$ are Conductors and $\frac{7}{11}$ sub conductors *The remainder are* Staff Serjeants and Serjeants. In the case of the *Military* Engineering Establishment the fixed cadre for the purposes of the above calculation is taken at 150 when the strength (exclusive of seconded) is below 162 at 175 when the strength reaches 162 but is below 192 at 210, when the strength reaches or is above 192
In the case of the Barrack Department the fixed cadre is 107

4 The distribution of Furniture and Stores sub divisions is as follows —
N C 9 S C 7 E C 7 W C 2 Total 25

5 Military Mechanists are borne on the strength of H Company R E and their promotion etc is regulated in accordance with the rules contained in the Royal Warrant for Pay, etc

6 The distribution given above does not constitute the basis for scale audit by Commands

APPENDIX A—*concld.*

Part III.—Clerical, Drawing and Menial Establishments.

Class and Designation.	N. C.	S. C.	E. C.	W. C.	Total	Remarks
Clerical						
At A. H. Q.—						
Superintendents	. .				5	
Assistants	. .	. .	. .	. .	11	
Clerks	. .				12	
In Commands and districts—						
Head Clerks	7	6	6	4	23	Offices of C. Es. (4); Dy. C. E. (1), C. R. Es., 1st class (10), C. R. Es., 2nd class (8)
Clerks, Upper Division	31	22	20	12	85	Allocated to districts by Command H. Q.
Clerks, Lower Division	123	84	76	45	328	

Drawing						
At A H Q—						
Head Assistant					1	
Assistants					[illegible]	
Blue Printer					1	
In Commands and Districts—						
Head Draftsmen	1	1	1	1	4	Offices of C Es
Draftsmen Upper Division	14	7	[illegible]	4		Allocated to districts by Command H Q
Draftsmen Lower Division	[illegible]	1	1[illegible]	7	[illegible]	
Menial						
At A H Q—						
D[illegible]					[illegible]	
Peons					1	1 J[illegible]adar [illegible] 1 duffadar [illegible] 1[illegible] peons 1 chowkidar
In Commands and Districts—						
D[illegible]		7	7	[illegible]		Allocated to d[illegible] by Command H Q
Peons	1[illegible]	103	1[illegible]		47	

NOTES—1 The [illegible] is empowered to vary the allotment of establishments between Commands
2 The approval of the [illegible] is required to the establishments employed in the office of a C E
3 The distribution [illegible] above does not constitute the basis for scale [illegible] by Commands

APPENDIX B.

(Referred to in para. 28.)

FORMS FOR THE SCHEDULE OF DEMANDS FOR ENGINEER SERVICES.

Form A. General Abstract of Schedule of Demands for Engineer Services for .... (year).

Item No	Heads	Anticipated for current year.	Demand for next year.	REMARKS
		Rs	Rs	
1	Head A —Works	..	..	..
2	Sub-heads 1-7 . { Major Works in progress (Form B)	..	..	..
3	{ New Major Works (Form C)	..	..	..
4	Sub-head 8 —Reserve for Major Works .	..	..	..
5	Sub-head 9 —Reserve for Minor Works .	..	..	..
6	Sub-head 10 —Losses	..	..	..
7	TOTAL HEAD A —WORKS .	..	..	..
8	Head B —Repairs and Renewals. (Form D)	..	..	..
9	Head C —Maintenance and Operation of Installations (Form E)	..	..	..
10	Head D — Rental charges (Form F)	..	..	..
11	Head E —Establishment (Form G) .	..	..	--
12	Head F —Tools and Plant (Form G) .	..	..	.
13	Head G —Suspense (Form H) . .	.	..	..
14	TOTAL DEMAND FOR EXPENDITURE HEADS A-G			..
15	Anticipated cost of stores from England, at 1s 6d to 1 rupee		.	..
16	Anticipated Receipts (Form I) .		.	.

NOTES —1 Entries against items 9, 15, should include provision on account of Factories and R. A F

2 The totals under "Anticipated for current year" against items 7, 14, 16, should take into account any known modifications to Budget figures

3 Against item 5 "Reserve for minor works" Commands and independent districts will include provision for all Army Services, except the following, which will be included at A. H. Q —

R A F, Ordnance Factories, Auxiliary and Territorial Force, Marine, Ordnance Depôts, Remount Department, Medical Store Depôts, Simla Imperial Division (P. W. D).

4 In the case of works, etc , executed by the P. W D on behalf of the Army, etc , charges on account of establishment and tools and plant will be included (for the purposes of this schedule) in Form G. In forms B and C against each work being or to be executed by the P. W. D there will be entered in the Remarks column "Payable to P. W D for establishment Rs. for T & P. Rs. " and the same entry will be made at the foot of Forms B C D, and F. In each case the percentage levied is to be stated

5 An entry should not be made under "losses" unless a full explanation is given as to why losses are anticipated.

APPENDIX B—*contd.*

Form B —Major Works in progress.

Sub-head, etc Name of work and locality	Amount of estimate	Anticipated Expenditure		Required next year		Remarks Authority for work
		during current year	to end of current year	Minimum	Normal.	
	Rs	Rs	Rs	Rs	Rs	

Form C.—New Major Works

Sub head, etc Name of work and locality	Amount of estimate	Allotment proposed	Remarks Brief explanation of necessity Authority if approved (If necessity not yet accepted by A H Q, full explanation to be given)
	Rs	Rs	

4 The sub-heads to be used are as follows —

1 Accommodation—
(a) Officers Quarters and Messes
(b) British Troops
(c) Indian Troops
(d) Miscellaneous
(e) Auxiliary and Territorial Forces

2 Hospitals—
(a) British
(b) Indian

3 Buildings for depôts, etc.—
(a) Training and educational.
(b) (i) Ordnance depôts
(ii) Ordnance Inspection
(c) Supply and Transport depôts
(d) Medical Store depôts
(e) Remount depôts
(f) Marine, including Admiralty buildings

4 Special works—
(a) Defences
(b) Mobilization Works
(c) Miscellaneous

5 Land, Roads, Drains and Conservancy—
(a) Land.
(b) Roads in Cantonments.
(c) Roads ex Cantonments
(d) Railway sidings
(e) Drainage
(f) Conservancy

6 Furniture and Equipment

7 Installations—
(a) Water supply
(b) Electrical
(c) Icemaking and Refrigerating
(d) Miscellaneous machinery

APPENDIX B—*contd.*

Form D.—Repairs and Renewals.

Service	1. Buildings.			2. Roads in Cantts.			3. Roads ex Cantts.			4. Furniture.			5. Miscellaneous.		Total.	
	Capital value.	Anticipated current year.	Required next year.	Miles.	Anticipated current year.	Required next year.	Miles.	Anticipated current year.	Required next year.	Book value.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.
	Rs.	Rs.	Rs.		Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1. Army, excluding items below																
2. Marine Department																
3. Auxiliary Force																
4. Territorial Force																
5. Ordnance Depots																
6. Remount Department																
7. Medical Store Depots																
8. Ordnance Factories																
9. R. A. F.																
10. Total Expenditure																

Notes.—1. Repairs and renewals to buildings are to be calculated at 1½ per cent. (1¼ repairs : ¼ renewals) on the capital value.
2. Repairs and renewals to roads in cantonments at Rs. 650 per mile; roads *ex* cantonments Rs. 1,000 per mile.
3. Repairs and renewals to furniture at 6¼ per cent. (5 repairs : 1¼ renewals) on the book value actually on charge.
4. Miscellaneous repairs, which include rifle ranges, drains, temporary buildings, defences, etc., at actual estimated requirements.
5. Technical furniture for the R. A. F. is to be shown separately.
6. Repairs to landing grounds to be shown separately.

APPENDIX B—*contd*

Form E—Maintenance and Operation of Installations

Item	1 Water Supply		2 Electrical		3 Icemaking and Refrigerating		4 Miscellaneous Plant		5 Total	
	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year
	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs
Expenditure										—
1 (a) Installation establishments (See para 17 (b))										
2 (b) All other working expenses										
3 TOTAL EXPENDITURE										
4 (c) On costs at per cent on (a) & (b) (See para 17 (b))										
5 Depreciation charges										
6 Interest charges										
7 TOTAL ANNUAL COST										
8 TOTAL RECEIPTS										
9 Required for expenditure on renewals next year										

NOTES—1 Of the oncosts 1½ per cent will be taken to the M A G s budget under 48—Army and the remainder as a credit to the establishment grant

2 Every major renewal (costing over Rs 10 000) is to be specified separately and the necessity clearly explained A lump sum amount is to be given for renewals costing under Rs 10 000

3 The figures for Item 8 total receipts will be taken from Form 1

APPENDIX B—*contd.*

Form F.—General Charges.

Service.	1. Rent for hired Buildings.		2. Compensation for Quarters.		3. Rates and Taxes.		4. Payments for Railway Sidings and Platforms.		5. Rent for Land.		6. Care of Vacant Buildings.		7. Miscellaneous.		Total.	
	Anticipated current year.	Required next year	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.
1—9. As in Form D.	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..	Rs. ..
10. Total Expenditure	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Notes.—1. Any changes are to be explained, also any charges under 7—Miscellaneous.

2. Charges under 1. "Rent for buildings" should not include any rent, repairs or taxes in connection with buildings occupied by officers in receipt of lodging allowance, but the estimated expenditure on this account should be shown separately. In other cases charges under this head will be net, *i.e.*, payments less recoveries from tenants.

3. Charges under 2. "Compensation for quarters" are not applicable to officers.

APPENDIX B—*contd*

Form G.—Establishment and Tools and Plant

Part I.—Establishment Details

Item	Pay and Allowances Permanent Establishment		Pay and Allowances Temporary Establishment		Travelling Allowances		Contingencies		Total		Remarks
	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year	Anticipated current year	Required next year	
Administration	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	Rs	
1 C E and his office . .											Any changes are to be explained
Executive											
2 (*a*) Buildings & Roads .											
3 (*b*) E & M Supervision .											
4 (*c*) E & M Installation Staffs (See para 17(*b*))											
5 (*d*) Barrack Deptt . .											
6 (*e*) Stores .											
7 Pay of officers not at duty in M E S in India											
8 Pay of officers not at duty in M E S Home Payments											Will be entered by E-in-C
9 Totals .											

APPENDIX B—*contd.*

PART II.—DEMAND.

Item.	Establishment.		Tools and Plant.		Audit.		Total.		Remarks.
	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	Anticipated current year.	Required next year.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	
1. Gross M. E. S. Expenditure	..	..	..	..	..	..	..	..	For Establishment from Form G, Part I, Item 9.
2. Payments to P. W. D.	..	..	..	..	..		..	..	
3. Gross amount chargeable to 50-M.E.S.	..	..	..	..	..	..	..	..	
4. Credits from Installations	..	..	..	..	..	..	..	..	From Part I, Item 4, shown as debit in item 1, Form E.
Credits from—									
5. Ordnance Factories	..	..	..	..	..	..	..	..	Rates assessed as ordered in para. 30.
6. R. A. F.	..	..	..	..	..	..	..	..	
7. Civil Imperial	..	..	..	..	..	..	..	..	
8. Civil Provincial	..	..	..	..	..	..	..	..	
9. Miscellaneous	..	..	..	..	..	..	..	..	
10. TOTAL CREDITS	..	..	..	..	..	..	..	..	

APPENDIX B – *contd*

Form H —Suspense

Item	Balances			Remarks
	Actual end last year	Anticipat ed end current year	Anticipat ed end next year	
	Rs	Rs	Rs	
1 Stock limit				
2 Stock				In red ink.
3 Purchases in India				
4 Purchases in England				
5 Manufactures				
6 Workshops				
Totals items 2 6				

Form No 1

Part I —Head XXXVIII—M E Services Revenue

Item	Actuals last financial year	Anticipated current financial year	Antic pated next financial year
	Rs	Rs	Rs
1 Rent of buildings			
2 furniture			
3 Sales of buildings			
4 furniture			
5 tools and plant			
6 produce			
7 old materials			
8 Value of materials received from old buildings			
9 Unclaimed deposits			
10 Fines refunds and miscellaneous			
11 Electrical payments			
12 Water supply payments			
13 Payments on account of ice			
Total			

APPENDIX B—*contd.*

PART II.—DETAILS OF CHARGES.

Main Head.	Item.	Rent of buildings.	Payments for. Water.	Payments for. Electrical.
		Rs.	Rs.	Rs.
MAIN HEAD.—48—ARMY—				
Head I.—Maintenance of the Standing Army—				
A. Forces in India Proper and Burma—				
(I) Fighting Services .	1. (*a*) Cavalry . . .	..	..	..
	2. (*b*) Artillery . . .		..	..
	3. (*c*) Engineers . . .	..	..	..
	4. (*d*) Pioneers . . .	..	..	..
	5. (*e*) Infantry . . .	..	..	..
	6. (*f*) Tank Corps . .	..	..	..
	7. (*g*) Indian Signal Corps .	..	..	...
(II) Administrative Services.	8. (*a*) Supply Companies .	..	..	..
	9. (*b*) Animal Transport Units	..	..	..
	10. (*c*) Mechanical Transport Units.	..	..	..
	11. (*d*) Medical Services . .	..	..	..
	12. (*e*) Veterinary Services .	..	..	..
(III) Miscellaneous Units	13. (*a*) G. G's Bodyguard .	..	..	..
	14. (*b*) G. G's Band . .	..	..	..
	15. (*c*) Nepal Escort . .	..	..	..
Head II.—Educational, etc., establishments—				
A. Educational, etc., Staff—				
(*a*) Supervising and Inspecting Staff	16. (i) Commandant, S. A. School, Pachmarhi.	..	..	..
	17. (ii) Inspector Physical training.	..	..	..
	18. (*b*) Staff College, Quetta .	..	..	..
(*c*) Small Arms Schools .	19. (i) Pachmarhi . . .	..	..	...
	20. (ii) Satara . . .	..	..	..
	21. (*d*) Physical Training School, Ambala.	..	..	..
	22. (*e*) Equitation School, Saugor.	..	..	..
	23. (*f*) Senior Officers School, Belgaum.	..	..	..
	24. (*g*) Machine Gun School, Ahmednagar.	..	...	..
	25. (*h*) School of Artillery, Kakul.	...	..	..
	26. (*i*) Tank Corps School, Ahmednagar.	..	..	..
	27. (*j*) M. T. Training Centre, Sitapur.	..	..	..
	28. (*k*) Army Veterinary Schools, Poona, Ambala.	..	..	..
	29. (*l*) I. A. S. C. Training School, Rawalpindi.	..	..	..
	30. (*m*) Army School of Cookery, Poona.	..	..	..
	31. (*n*) Military Medical Pupils	..	..	..
	32. (*o*) Army Signal School, Poona.	..	..	..
	Total Carried over.	..	..	..

APPENDIX B—*contd*

PART—II DETAILS OF CHARGES—*contd*

Ma n Head	Iten	Rent of build ngs	Payment for Water	Payment for Elec trical
		Rs	Rs	Rs
He d II —Educat on l etc establ shme t—contd	Total Brought o er			
B Army Ed cation—				
(a) Supervi ng and In specti g Staff	33 ( ) A H Q 34 (i) Commands 35 (i) Distr ts 36 (b) Garrison Regimental etc Sch ols B T 3 c)Garri on Regimental et Schools I T 38 (d) School of Educat on Belgaum 39 (e) Lawrence Royal Mil tary School Sanawar 40 (h) P O W College Dehra Dun 41 ( ) K G R M School			.. .. ..
C Working Expenses of H ı tals	42 (1) B S Hosp tals 43 (2) I S Hospitals 44 (3) Central Demalotopia Laboratory 45 (4) Station Staff D pensary			
D Working Expenses of Depôt etc	46 (a) Arsenals and Ordnance depôts 47 (b) Clothing depôts 48 (c) Supply depôts 49 (d) Grain Crushing depôts and flour mills 50 (e) Medical Store depôts 51 (f) Veterinary hosp tals 52 (g) Remount depôts and breed ng operat ons 53 (h) Central Mechanical Store depôts			
E Working expenses of manufacturing ments	54 (a) Bakeries			
	60 (g) Base Mechanical Trans port Workshops			
F Inspect on of Stores	61 (a) Techni al Inspectors Mechan cal Transport 6 (b) Mil tary Food Labora tory Kasauli 63 (c) In pector of equ pment and general stores 64 (d) Inspector of lethal wea pons etc			
G Mi itary Accounts offices	65 (a) Military Accountant General 66 (b) Command di trict etc Offices 6 (c) Army Factory Accounts			
	T tal Carried over			

APPENDIX B—*concld.*

Part II.—Details of Charges—*concld.*

Main Head.	Item.	Rent of buildings.	Payments for Water.	Payments for Electrical.
		Rs.	Rs.	Rs.
	Total Brought over.			
Head II.—Education, etc., establishments concld				
H. Ecclesiastical establishments.	68. (*a*) Presbyterian Church.	..	..	..
	69 (*b*) Church of Rome.	..	..	..
	70. (*c*) Wesleyan Church	..	..	..
	71. (*d*) Baptist & Congregational Churches.	..	..	..
I. Cantonment Department (Offices and Staff).	72.			
J. Miscellaneous	73. (*a*) Recruiting establishment.	..	..	..
	74. (*b*) Hill Sanitaria & depôts	..	..	..
	75. (*c*) I. A. S. C. Record Office, Sitapur.	..	..	..
	76. (*d*) Veterinary record office	..	..	..
Head III.—Staffs	77. (*a*) A. H. Q.	..	..	..
	78. (*b*) Commands	..	..	..
	79. (*c*) Districts and Brigades	..	..	..
	80. (*d*) Embarkation		..	..
	81. (*e*) Railway Transport	..	..	..
	82. (*f*) Military prisons and detention barracks.	..	..	..
	83. (*g*) Garrison Quartermasters Rest Camps, etc.	..	..	..
B Auxiliary and Territorial Forces.	84. (*a*) Auxiliary Force	..	..	..
	85. (*b*) Territorial Force	..	..	..
C. Royal Air Force	86.			
Main Head.—49—Marine Department.	87.			
Main Head.—50—M. E. S.—	88. (*a*) Works	..	..	..
	89. (*b*) Repairs and renewals		..	..
	90. (*c*) Maintenance and Operation of Installations.	..	..	..
	91. (*d*) Establishment Contingencies.	..	..	..
	92 (*e*) Suspense (Manufactures and Workshops).	..	..	..
Main Head.—41—Civil	93. (*a*) Imperial under E.-in-C.	..	..	..
	94. (*b*) Provincial	..	..	..
Recoveries from non-entitled persons	95.			
	Totals	..	..	..

Notes—1. Only items (quoting item Nos. as above) to be included that concern the Command.

2. Rent, where charged, will be calculated at 5 per cent on capital value of buildings used.

APPENDIX C.

(Referred to in para 33)

Memorandum of the rules to govern the construction of civil works in the North-West Frontier Province and Baluchistan by the M E S

1 There are four main stages in the project for a civil work namely, administrative approval expenditure sanction technical sanction and appropriation or re-appropriation. These stages are described in the following paragraphs

2 Projects for works are usually initiated by one or other of the administrative departments of Government and the first step to be taken is to obtain the formal concurrence of the department concerned in the proposals Such concurrence is termed the administrative approval to the work The head of the province is empowered to accord administrative approval to any work, costing not more than Rs 20 000 to meet the needs of a department under his direct administration and he may at his discretion delegate the whole or part of this power to officers of such a department Administrative approval to works costing less than Rs 20,000, required to meet the needs of central departments not directly administered by the head of the province, *e g*, the Posts and Telegraphs Department, Meteorological Department, etc, will be accorded by the officer of that department to whom the G of I have delegated the necessary power If the amount of the estimate exceeds that upto which any officer of the central department in question is authorised to accord administrative approval such approval will be accorded by the G of I in the administrative department concerned All works for whatever

all such proposals and to oppose any which, in his view, are either unnecessary to meet the reasonable needs of the civil administration or uneconomical

3 The duty of obtaining administrative approval rests primarily with the local officer of the department requiring the work a plinth area or abstract estimate and such preliminary plans as are necessary to elucidate the proposals being obtained from the M E S The local officer of these services may be required to provide them on the requisition of the senior officer of the department in the local administration. He is not bound to comply with a requisition from any lower officer unless such officer is himself empowered to accord administrative approval to the proposal

4 In cases in which the amount of the plinth area or abstract estimate exceeds the amount up to which the officer of the M E S who prepares it is authorized to accord technical sanction (*vide* paragraph 9) the estimate and plans should be forwarded to the requisitioning authority through the officer whose technical sanction will ultimately be required to the work

5 It is to be remembered that it is upon the amount of the administrative

of 10 per cent in the actual cost of the work over the amount administratively approved the head of the province will in submitting the plinth area or abstract estimate for the approval of the G of I in the department concerned, cause an addition of 10 per cent to be made to it to cover this permissible

excess. This addition will be regarded as a reserve and will be available to meet these excesses and for no other purpose.

6. The procedure prescribed in paragraphs 2 to 5 above will apply also in cases where a revised administrative approval becomes necessary. Such revised approval is required if the detailed estimates, when prepared, exceed the amount administratively approved (excluding, in the case of works administratively approved by the G. of I., the addition referred to in the previous paragraph) by more than 5 per cent., if at any time during the course of construction it becomes evident that the total amount administratively approved will (excluding the addition referred to above) be exceeded by an amount greater than that permissible under the rules in paragraph 26 of the Regulations for the M. E. S., or if material deviations from the original proposals are contemplated, even though the cost of the same may possibly be covered by savings on other items.

7. No administrative approval is required in the case of repairs.

8. *Expenditure sanction* means the concurrence of the G. of I. in the Finance Department in the expenditure proposed, and is necessary in all cases where the amount of the estimate exceeds Rs. 20,000. The duty of obtaining expenditure sanction rests with the department requiring the work, and applications will be addressed to the G. of I. in the administrative department concerned, which will then make its recommendation to the Finance Department. It is usually, though not invariably, convenient to apply simultaneously for administrative approval and expenditure sanction. In the case of works costing not more than Rs. 20,000, the act of appropriation or reappropriation of funds (*vide* paragraph 12 below) will operate as sanction to the expenditure concerned.

9. Except in cases where the rules in the Regulations or the M. E. S. permit the contrary, for each individual work proposed to be carried out a properly detailed estimate must be prepared for technical sanction, which must be obtained before the construction of the work is commenced. As its name indicates, technical sanction is the guarantee of a professional authority that the proposals are structurally sound and that the estimates are accurately calculated and based on adequate data. Such sanction will be accorded by the officer of the M. E. S. authorized to do so. Officers of these Services exercise, in respect of civil works, the same powers that they exercise in respect of military works. The procedure in connection with such sanctions will be that prescribed in the Regulations for the M. E. S., with one exception. Oridinarily, technical sanction should be given to the proposed work as a whole before expenditure on it is incurred. Under paragraph 26 of the Regulations for the M. E. S., it is permissible to depart from this principle, subject to certain conditions, but, in the case of civil works, no expenditure may be incurred under the provisions of this paragraph upon a work to which, as a whole, technical sanction has not been accorded, except with the prior concurrence of the head of the province who is responsible to the G. of I. and to the Legislature that there is no excess over the amount up to which expenditure sanction has been accorded.

10. In the case of original work, the countersignature of the senior officer in the local administration of the department on behalf of which its execution is proposed, or of such other officer of lower status as may have been empowered to accord administrative approval to it, should be obtained to the plans and estimates in token of his acceptance of them before technical sanction to the latter is accorded. If, subsequent to the grant of technical sanction important structural alterations in design are contemplated, the orders of the original sanctioning authority should be obtained, even though no additional expenditure may be involved by the alterations.

11. It is not essential that expenditure sanction should invariably be obtained before technical sanction is given. In some cases it may be convenient

to reverse the order of these stages, but, until funds for the work hav actually been allotted or promised by competent authority, an officer of th M. E S cannot be required, except by his departmental superiors, t prepare the detailed plans and estimates necessary for the purpose c technical sanction

12 Appropriation or re-appropriation represents the allotment of a parti cular sum of money to meet expenditure on a specified object It is operativ only for the official year in which it is made

13 It follows from the
in cases whe

made. If n
office
or in

[illegible] liability and states approximately the amoun of the liability which he is likely to incur

14 The head of the province has full powers to appropriate funds out o the sums allotted to him to meet expenditure from Central Revenues upon Imperial Civil Works, provided that the work for which supply is appropriated has received such administrative approval and technical and expenditure sanction as is required by these rules, that the amount so appropriated to any work does not exceed the amount shown for that work in the estimate to which technical sanction has been accorded, and that supply provided for non voted items of expenditure is not appropriated to votable items and *vice versa*

15 Subject to the above conditions, the head of the prov
appropriate

[illegible] where the conditions specified above are not fulfilled the sanction of the G of I in the Department of Industries and Labour (Public Works Branch) is required to the appropriation or re-appropriation

17 The head of the province may delegate any or all of his powers of appropriation or reappropriation to his Public Works Secretary

APPENDIX D.

(Referred to in para. 68.)

The following extracts from the Indian Works of Defence Act (VII of 1903), as amended by Act V of 1909, are republished here for general guidance.

* * * * * * * * * * * * *

3. (1) Whenever it appears to the Local Government that it is necessary to impose restrictions upon the use and enjoyment of land in the vicinity of any work of defence or of any site intended to be used or to be acquired for any such work, in order that such land may be kept free from buildings and other obstructions, a declaration shall be made to that effect under the signature of a secretary to such government or of some officer duly authorised to certify its orders.

(2) The said declaration shall be published in the local official gazette and shall state the district or other territorial division in which the land is situate and the place where a sketch plan of the land, which shall be prepared on a scale not smaller than six inches to the mile and shall distinguish the boundaries referred to in section 7, may be inspected; and the collector shall cause public notice of the substance of the said declaration to be given at convenient places in the locality.

(3) The said declaration shall be conclusive proof that it is necessary to keep the land free from buildings and other obstructions.

* * * * * * * * * * * * *

7. From and after the publication of the notice mentioned in section 3, sub-section (2), such of the following restrictions as the Local Government may in its discretion declare therein shall attach with reference to such land namely :—

(a) Within an outer boundary which, except so far as is otherwise provided in section 39, sub-section (4), may extend to a distance of two thousand yards from the crest of the outer parapet of the work—

Class ne.

(i) no variation shall be made in the ground level, and no building, wall, bank, or other construction above the ground shall be maintained, erected, added to or altered otherwise than with the written approval of the G. O. C. the district and on such conditions as he may prescribe;

(ii) no wood, earth, stone, brick, gravel, sand or other material shall be stacked, stored or otherwise accumulated:

Provided that, with the written approval of the G. O. C. the District and on such conditions as he may prescribe, road-ballast, manure and agricultural produce may be exempted from the prohibition.

Provided, also, that any person having control of the land as owner, lessee or occupier shall be bound forthwith to remove such road-ballast, manure or agricultural produce, without compensation, on the requisition of the C. O.

(iii) no surveying operation shall be conducted otherwise than by or under the personal supervision of a public servant duly

authorised in this behalf, in the case of land under the control of military authority, by the C. O and, in other cases, by the collector with the concurrence of the C O, and

(iv) where any building, wall bank or other construction above the ground has been permitted under clause (i) of this sub section to be maintained, erected, added to or altered, repairs shall not, without the written approval of the G O C. the District be made with materials different in kind from those employed in the original building, wall, bank or other construction.

(b) Within a second boundary which may extend to a distance of one thousand yards from the crest of the outer parapet of the work, the restrictions enumerated in clause (a) shall apply with the following additional limitations, namely —

(i) no building, wall, bank or other construction of permanent materials above the ground shall be maintained or erected B Zon

Provided that, with the written approval of the G O C the District, and on such conditions as he may prescribe, huts, fences and other constructions of wood or other materials, easily destroyed or removed may be maintained, erected, added to or altered,

Provided, also, that any person having control of the land as owner, lessee or occupier shall be bound forthwith to destroy or remove such huts, fences or other constructions, without compensation, upon an order in writing signed by the G O C. the District, and

(ii) live hedges, rows or clumps of trees or orchards shall not be maintained, planted, added to or altered otherwise than with the written approval of the G O C. the District and on such conditions as he may prescribe.

(c) Within a third boundary which may extend to a distance of five hundred yards from the crest of the outer parapet of the work, the restrictions enumerated in clauses (a) and (b) shall apply with the following additional limitation, namely —

No building or other construction on the surface, and no excavation building or other construction below the surface, shall be maintained or erected C C Zon

Provided that with the written approval of the C O and on such conditions as he may prescribe open railing and dry brush wood fences may be exempted from this prohibition.

APPENDIX E.

(*Referred to in para. 69.*)

Military Railway Lines.

The following sections of the North-Western Railway are classified as Military Lines :—

(i) Sind-Sagar [*i.e.*, main line from Lalamusa to Shershah and Kundian to Campbellpore with branches and sections, *viz.*—

Golra-Basal Section.

Jand-Kohat Section.

Malakwal-Bhera branch.

Chalisa-Khewra—Dandot branch (including Gunjyal Warchha and Haranpur-Gharibwal sections).

Daudkhel-Mari branch.

Mahmudkot-Ghazi Ghat branch.

Peshawar-Jamrud branch.]

(ii) Nowshera-Dargai Section.

(iii) Sind-Pishin Section (*i.e.* main line from Ruk to Chaman and the loop line from Sibi to Bostan).

(vi) Kohat-Thal.

(v) Nushki Extension (*i.e.*, from Spezand junction to Mirjawa).

(vi) Laki-Pezu-Tank.

(vii) Tank-Kaur-Khirgi.

viii) Khanai-Hindubagh.

(ix) Khyber railway.

(x) Dera Ismail Khan-Tank Decauville Railway.

APPENDIX F.

(Referred to in para 86)

Rules for M E S Electrical Supplies

internal wiring and fittings, for authorised domestic services in military buildings, ceiling fans maintained for hire and quarters for staff

All additions and alterations which are of the nature of capital expenditure are to be adjusted against the capital account

All capital expenditure on account of internal wiring and fittings to buildings will be shown on completion in the capital registers of buildings Fans for hire will be borne on a separate register All other capital expenditure will remain on the register of the installation.

(b) The cost of materials at site will be booked against the annual maintenance and operation estimates also the following maintenance and operation expenses —

I Payments for all electrical energy supplied by municipalities or corporations, etc

II Salaries and wages of all personnel solely employed in the power house and on the external distribution system of the installation concerned

III The cost of all stores and materials including fuel oil water, etc, consumed or used in connection with the supply of electrical energy

IV The cost of upkeep of the installation (e g repairs to buildings, generating plant, distribution mains meters quarters for staff, etc, included in the capital cost of the installation proper)

Note A —The cost of renewals to buildings, plant, etc, will be dealt with in accordance with the orders in paragraph 83

Note B —The cost of upkeep of (1) internal wiring and fittings will be charged to repairs and renewals to buildings and (2) ceiling fans maintained for hire will be charged to repairs miscellaneous

V Pay and all incidental charges in connection with establishment, clerical or otherwise, engaged in the reading and check of meters

3 **Authorised connections and scales of fittings and Internal wiring** —(a) The extent to which electrical installations may be established in military buildings will be subject to the scales for lighting ventilation and heating laid down in Annexures I, II and III Ventilation will only be provided in very hot and normal plain stations unless the G of I sanction has been obtained to a semi hill station being classified as an authorised station.

(b) All repairs and renewals to M. E S internal installations and fittings, from whatever cause required, will be made by the M. E. S, but as regards

incidence of cost see paragraph 57. No fittings or current consuming devices, in addition to, or in substitution of, those provided by the M. E. S. shall be installed by an occupier without the express sanction of the G. E. in each case.

(c) In the case of metered buildings where all or part of the electricity consumed is paid for, illumination may be provided in excess of the scales, at the request of the occupants and with the approval of the G. E., by the substitution of lamps of higher candle power. The free allowance of electricity, if any, shall however, in any case, be only given in respect of the candle power authorised.

4. **Entitled and non-entitled persons.**—(a) The general principle is that with the exception of lady nurses who will obtain a free supply on a moderate scale, only those persons who are entitled to an allowance of oil or of money in lieu, or to punkha coolies under the regulations, should be regarded as entitled to free allowances of electricity for lighting and for punkhas or fans respectively.

A table showing classes of persons (i) partially entitled, and (ii) non-entitled to a supply of electricity, is given in Annexure IV.

(b) The rates of free allowance of electricity, per mensem in units per authorised c. p. of lighting, per authorised fan, and per authorised radiator, and for authorised supply of electric energy for power in military buildings as the case may be, are given in Annexures I, II, and III, respectively.

(c) The free allowance admissible to any individual shall be based on the whole of the authorised lights and fans actually installed in the quarters allotted to him, at the rates laid down in Annexures I and II for the class of the individual in question.

(d) No free allowance is admissible for lights, fans, etc., which may be installed in excess of the authorised scale; but the occupier of a quarter may, if he so desires, ask for the installation to be reduced to the scale authorised for the class of quarters to which he is entitled.

(e) The free allowance for fans, etc., is restricted to the punkha season as notified in Station Orders.

(f) Any portion of a free allowance of electricity for any month not utilized during that month shall lapse.

(g) Persons who are not entitled to rent-free quarters are "non-entitled" as regards electrical installations and will pay rent.

(h) Persons who occupy quarters free of rent are also considered "non-entitled" provided that:—

(i) their emoluments as defined in A. R. I. Vol. III exceed Rs. 400 per mensem except when specifically sanctioned by the G. of I.;

(ii) they are not in receipt of a free allowance of electricity.

(i) An entitled person is one who receives a free supply at State expense on a fixed scale, the cost of which is met from the administrative head affected (see paragraph 82).

A non-entitled person is one who does not receive a free supply at State expense.

5. **Regulation for supply of electricity.**—(a) The hours during which power for lighting and heating will be supplied to the various classes of buildings and quarters will be as shown in Annexures I and III. The provision of free lighting beyond the authorised hours will be permitted only in very exceptional cases and then only by the orders of the O. C. Brigade Area.

(b) The maximum duration of the punkha season will be fixed for each station under the orders of the G. O. C. District who will be guided by the average duration of the season in previous years. Within these limits the dates of the start and the end of the punkha season will be settled by the O. C. station and the dates will be notified in Station Orders.

The actual period of working should be reduced to a minimum

(c) The daily hours of starting and stopping of punkhas and fans for entitled persons will vary according to the season and climate, and will be published in Station Orders subject to the limits specified in Annexure II, which limits will only be exceeded in exceptional cases and subject to rule in clause (d) below

(d) When power is only required normally for domestic purposes and for heaters in hospitals its supply will be limited to the hours during which a free supply of electricity is authorised.

If however, it is ne[illegible]
e g, driving workshop[illegible]
occupied by non or [illegible]
authorised hours for [illegible]
and [illegible]

(e) The O C Brigade Area will be respon[illegible]

(f) Where it is impracticable to rem[illegible]

(g) In order that the supply of electricity, and of lights fans punkhas, etc, may be controlled and adjusted to the actual requirements of the troops the O C station will arrange for the G E concerned to be supplied monthly with a statement showing the actual occupation of each building in the station.

(h) The G E will control the use of electricity in such buildings as are not specifically handed over to regimental control for switching on and switching off

6 **Unauthorised fittings** —No change in the fittings or current consuming devices already approved for private buildings may be made and no unauthorised appliances may be installed or used without the prior sanction of the G E

7. **Meters** —(a) Military buildings will be metered as laid down in Annexures I, II and III Meters will always be provided for private house connections

(b) *Should it not be possible to provide a meter or should an installed meter* fail to register accurately for any period the consumer will pay in respect of the electric energy supplied during such period a reasonable proportion based on subsequent corresponding readings of the meter substituted for the defective meter

(c) If a consumer doubts the accuracy of his meter, he may require the local officer of the M E S to test the meter For each such test a deposit of Rs 5 must be prepaid. If the test proves the meter to be registering inaccurately the deposit will be returned to the consumer and any adjustment necessitated thereby made in the bill for the current month If, on the other hand, the meter is found to be registering accurately the depos[illegible] of Rs 5 will be forfe[illegible]
when it is [illegible]

8. **Prov**[illegible] buildings [illegible] authorised purposes —(a) In order to reduce

expenditure on the electrification of hired buildings the following procedure should be observed :—

(i) Buildings which are already electrified should be hired in preference to others.

(ii) If no suitable electrified buildings exist the landlords should be asked to electrify buildings at their expense before they are taken over.

(iii) Non-electrified buildings may be electrified at Government expense if hired for five years or more or acquired on a repairing lease under the Cantonments House Accommodation Act.

(iv) Buildings used for entitled persons may be electrified if hired other than on a monthly basis.

(v) Entitled persons should always be accommodated in government quarters as far as is practicable in order to avoid the electrification of buildings hired for short terms [see (iv) above].

(b) When buildings already electrified are taken over the conditions of the lease must allow :—

(i) The M. E. S. to make such alterations, additions, etc., as may be necessary to bring the provision of lights and fans within the scales laid down in these rules where these are below such scales or where they are above the scales in the case of "entitled" occupants.

(ii) Any extra fittings, etc., supplied by the M. E. S. to be removed by them before the building is handed back to the landlord.

(iii) The M. E. S. to maintain at Government expense the installation as it stands except where the G. O. C. District considers it will be more economical to allow the landlord to maintain the installation, the rental to be paid being calculated accordingly.

(iv) Such renewals as may be necessary during the lease (except bulbs which come in under the head maintenance) being carried out by the landlord or by the M. E. S. at the expense of the landlord.

NOTE.—If the building is taken over on a repairing lease the responsibility between the landlord and the M.E.S. as regards replacement and repairs must be clearly defined. The building should be taken over without bulbs, and usually without fans.

(c) When buildings, which are not electrified, are taken over the conditions of the lease must allow :—

(i) the M. E. S. to electrify the building and to remove fittings, etc., on the expiry of the lease unless the landlord desires to purchase them,

(ii) of the installation as provided by the M. E. S. being maintained by them.

(d) In all cases the rules for government buildings apply, *e. g.*, as regards scales, allowances, recoveries of rent, restriction regarding officers' quarters, etc.

(e) The rents paid to the landlords for hired buildings which are electrified whether by the landlord or the M. E. S. will be divided as follows :—

(i) rent for the building itself, exclusive of electric wiring and fittings ;

(ii) rent for the electric wiring and fittings.

9. Non-military connections.—(a) The connection of private buildings to M. E. S. supply system is authorised. In every case before a supply is given the approval of the G. O. C. District to the individual connections will be obtained and an agreement on India Army Form W.-1774 executed with the owner of the building and not the temporary tenant. The technical aspects of each case will be decided by the C. R. E.

(b) The connection of buildings of the Civil Department to a M E S source of supply is authorised subject to the conditions laid down in Annexure V The prior approval of the G O C District must be obtained.

(c) The installation of electric lights and fans in public military buildings at private expense is authorised subject to the conditions laid down in Annexure VI *The arrangement must be ratified by the C R. E under orders of the* G O C. District before supply is given

(d) Rules for the installation of electric lights and fans in churches are given in Annexure VII

10 Stock of Fans—A stock of ceiling fans may be provided subject to the approval of the G O C in C. of Command or of the Q M G in the case of Independent Districts for —

(i) issue on hire to military occupants of private bungalows.

(ii) erection up to the authorised scale in private buildings hired for entitled or non entitled persons under paragraph 8

In case of non entitled persons when the rent for such fans is not included in the rent for the wiring and fittings etc a separate hire charge will be made. The rate of hire will be inclusive of erection and dismantling charges but will not include the ceiling fan suspension clamps nor any wiring beyond the connection to the ceiling rose It will include the cost of upkeep, fair wear and tear only, and any damages beyond this will be charged in addition to the hire

A stock of table fans will not be kept

11 Extension of M E Services Mains—Rules regarding the apportionment of expenditure in providing extension of M E S mains to give connections to private buildings are given in Annexure VIII

12 Method of effecting recoveries—(a) The method of effecting recoveries for energy and rent for installations is given in M E S Account Code

(b) G Os C have no power to sanction the write off of recoveries Any waiving of authorised charges requires the sanction of the G of I

13 Indian Electricity Act—(a) The Indian Electricity Act 1910 is binding on M E S installations

(b) Section 3 (2) (a) of this Act provides that a Local Government cannot grant a license to supply electrical energy in any station where troops are quartered without the concurrence of the E in C.

14 Auxiliary and Indian Territorial Force Units—(a) When current is generated by the M E S the Auxiliary and Indian Territorial Force units will receive a free supply of electricity if they are entitled to an allowance of oil or money in lieu under existing regulations.

(b) When current is obtained from a supply company the adjustment of charges will be as laid down in paragraph 86

ANNEXURE I.

Statement showing the authorised scale of illumination, etc., in Government Buildings.

NOTE.—The scales are based on the use of metallic filament lamps which will always be used except in special cases where carbon filament lamps may be more suitable such as for portable fittings.

Wall plugs may also be provided in addition to the scale laid down, at the discretion of the O. C. Station in hospitals and metered buildings such as quarters in which portable fittings are usually required even though not provided by Government.

The free allowance figures have been calculated on the following principles, which should be adopted in cases not provided for in the scales:—

(i) A month is calculated at 30 days.

(ii) For the half-year ending 30th September sunset is taken at 7 P. M. for the half-year ending 31st March at 6 P.M.

(iii) A metallic filament lamp uses 1·25 watts per c. p., *i.e.*, the units allowed per hour for each c. p. of lighting authorised is 0·00125.

(iv) In quarters the rate of free allowance allows each authorised lamp to be used for one half the authorised number of hours.

(v) In all other buildings including single roomed quarters the rate allows each authorised lamp to be run for the full authorised number of hours.

APPENDIX F.

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(a) Quarters, Messes, etc.		
1	Officers' (including Commissaries' Deputy and Assistant Commissaries' and Senior Assistant Surgeons') quarters, and Officers' Messes.	Authorised	As deemed necessary by the O. C. Station subject to the following restrictions :— (i) Scale of lighting should not exceed 1 c. p. to 6 sq. ft. in sitting rooms and 1 c. p. to 10 sq. ft. in other living rooms and moderate lighting, in no case to exceed 1 c. p. to 10 sq. ft. for other rooms, passages and verandahs. (ii) The number of lamps should not exceed 1 per 170 sq. ft. or part thereof in sitting rooms and 1 per 260 sq. ft. or part thereof in bed rooms. (iii) In other rooms, passages, etc., the number of lights should be reduced as much as possible by using as high a c. p. lamp as will ensure uniform and adequate lighting. (iv) No external lighting may be provided without the special approval of G. O. C. District.
2	Quarters for Departmental warrant and non-commissioned officers in receipt of consolidated rate of pay.	Do.	As deemed necessary by the O. C. station in each case but not to exceed 2 lamps per sitting room and one lamp per bed room with such lights in other places as the O. C. Station may consider essential.
3	Quarters for regimental and non-departmental Unattached List warrant officers, school mistresses, staff serjeants and serjeants and departmental N. C. Os. of the I. U. L. not in receipt of consolidated rate of pay.	Do.	As deemed necessary by the O. C. station in each case but not to exceed 1-25 c. p. lamp per sitting room and 1-16 c. p. lamp per bed room.
4	Serjeants' mess and recreation room—		
	(a) Mess room	Do.	1 c. p. to 10 sq. ft.
	(b) Recreation or anteroom (c) Billiard room	Do.	1 c. p. to 30 sq. ft. and 6-25 c. p. lamps per billiard table.
	(d) Pantry (e) Caterers' room (f) Beer store	Do.	1-16 c. p. lamp. 1 lamp not exceeding 25 c. p. in each.

Hospital Buildings

Maximum number of hours for which light is to be given daily, subject to rule 5(d)	Free allowance of units per mensem per authorised candle power installed	Provision of meters	REMARKS
5	6	7	8
As required No limit	Nil	Necessary for each quarter	Over billiard tables 6 lamps of 25 c p each will usually suffice these are extra to the scale provided in column 4
As required No limit	Nil	Ditto	
Sunset to midnight	Summer 1 Winter 11	Necessary for each block or each quarter, dep-	
Do	*Summer 15 Winter *19	Necessary for the building	* Free allowance is calculated only until 11 P M

A.—Buildings other than

Item.	Buildings	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(a) Quarters, Messes, etc.—concld.		
5	Hospitals—		
	(a) Quarters and public rooms.	Authorised . .	As per officers' quarters .
	(b) Managers' quarters .	Do. . .	As for quarters for departmental warrant officers.
6	Power House employés . .	Authorised subject to the approval of the G. O. C.-in-C. of Command in each case.	As for regimental W. and N. C. Os.
7	M. E. Services Inspection Houses.	Do. .	As deemed necessary by the O. C. Station.
	(b) Barracks for British Troops.		
1	For married rank and file .	Authorised .	As for quarters for regimental warrant officers.
2	For single men—		
	(a) Dormitories . .	Do. .	1 c. p. to 15 sq. ft.. . .
	(b) Dayrooms or dining halls.	Do. .	1 c. p. to 25 sq. ft. concentrated as required.
	(c) Quarters for single serjeants.	Do. .	1-25 c. p. and 1-16 c. p. lamp
	(d) Verandahs, passages and staircases.	Do. .	As required in each case, subject to the approval of the G. O. C. District.
	(e) Cook-house . .	Do. .	1 c. p. to 15 sq. ft.. .
	(f) Lavatories, latrines and urinaries.	Not authorised .	....
	(c) Barracks for Indian Troops.		
	Not authorised.		
	(d) Regimental Buildings for British Troops.		
1	Armourer's shop . . .	Not authorised .	....
2	Blacksmith's forge and workshop.	Do. .	....
3	Night piquet guard room .	Authorised .	1 c. p. to 15 sq. ft.. .

Hospital Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5(d)	Free allowance of units per mensem per authorised candle power installed	Provision of meters	REMARKS
5	6	7	8
As required No limit	Nil	Necessary for each block	Flat rate chargeable
Do.	Nil	Necessary for each quarter	Payment to be made at Government rate per unit for all units used
Sunset to mid night	Summer 1 Winter 11	Necessary	The concession of limited free lighting is admissible only to those power house employees who are required to live in Government quarters in the vicinity of the power house, irrespective of the classes or designations of the employés It is not admissible to Supervising establishment, *i e* persons whose pay is not charged to the M. & O estimate
As required. No limit	Nil	Do	
Sunset to 11 P M	Summer ·08 Winter 09	Do	
Sunset to lights out	All	Not essential but one meter per block of buildings should be provided	(a) One oil amp authorised for each dormitory and *will be supplied with oil* on the all night scale
	..	..	(d) (f) Oil lamps and oil are supplied, as required, for all night lighting in passages and staircases, latrines and urinaries
.	.	....	
.	.	....	
As for Item 6 below	All	Not essential	

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(d) Regimental Buildings for British Troops—concld.		
4	Orderly and courtmartial room—		
	(a) Orderly room . .	Authorised .	Normally one fixed light per room not exceeding 1 c. p. per 6 sq. ft. and one table lamp (25 c. p.) for each officers table.
	(b) Officers waiting room and clerks room or court-martial room.	Do. .	
	(c) Officers' room . .	Do. .	
5	Pay office	Do. .	
6	Quarter-guard and detention rooms—		
	(a) Guard room . .	Do. .	1 c. p. to 15 sq. ft. . . .
	(b) Guard detention room .	Do. .	1 lamp giving 1 c. p. to 30 sq. ft.
	(c) Barrack detention rooms.	Do. .	1 lamp not exceeding 25 c. p. per room, with switch in verandah.
7	Quartermasters' Stores, etc.—		
	(a) Store room. . .	Not authorised .	....
	(b) Tailor's shop . .	Do. .	....
	(c) Quartermaster's Office .	Authorised .	Normally one fixed light per room not exceeding 1 c. p. per 6 sq. ft. and one table lamp (25 c. p.) for each officer's table.
	(d) Dry Store room . .	Not authorised .	....
8	Regimental workshops . .	Not authorised .	....
9	Harness rooms . . .	Do. .	....
10	Gun sheds		
11	Heat stroke station . .	Authorised .	1 c. p. to 15 sq. ft. . . .
	(e) Institutes.		
1	Liquor bar portion—		
	(a) Privates' room . .	Authorised .	1 c. p. to 10 sq. ft. . .
	(b) Bar or issue room .	Do. .	1 c. p. to 15 sq. ft. . . .
	(c) Beer store . . .	Do. .	1 lamp not exceeding 25 c. p. .
	(d) Corporals' room . .	Do. .	1 c. p. to 10 sq. ft. . .. .

Hospital Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5(*d*)	Free allowance of units per mensem per authorised candle power installed	Provision of meters	REMARKS
5	6	7	8
As required	*Nil* . .	*Necessary for each set of offices*	
All night when a supply of current can be given	All	Not essential	
..	.	..	
.	..		
As required	*Nil*	Necessary for each set of offices	
.	..	..	
..	..	.. .	
	..	...	
As required .	All . .	Not essential	
As determined by O C Brigade between sunset and "lights out"	Nil . .	Necessary for the building	Lights may also be provided in verandahs of institutes under the authority of the G O C.

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps
1	2	3	4
	(e) Institutes—concld.		
2	Library portion—		
	(a) Reading room . .	Authorised .	1 c. p. to 6 sq. ft. . . .
	(b) Writing room . .	Do. .	1 c. p. to 10 sq. ft. . .
	(c) Book room . .	Do. .	
	(d) Librarian's quarters	Do. .	1-25 c. p. and 1-16 c. p. lamp .
3	Recreation and refreshment portion—		
	(a) Hall	Do. .	1 c. p. to 20 sq. ft . . .
	(b) Temperance room .	Do. .	1 c. p. to 6 sq. ft. . .
	(c) Games room . .	Do. .	
	(d) Billiard room . .	Do. .	1 c. p. to 30 sq. ft. and 6-25 c. p. lamps per billiard table.
	(e) Corporal's room . .	Do. .	1 c. p. to 10 sq. ft. and lights for billiard table as in 3 (d) above.
	(f) Supper room . .	Do. .	1 c. p. to 10 sq. ft. . . .
	(g) Supper issue room .	Do. .	1 c. p. to 15 sq. ft. . .
	(h) Branch liquor bar .	Do. .	
	(i) Grocery bar . .	Do. .	
	(j) Office . . .	Do. .	1 lamp not exceeding 25 c. p.
	(k) Store . . .	Do. .	
	(l) Lavatory . .	Do. .	1 lamp not exceeding 16 c. p.
	(m) Cook-house . .	Do. .	1 c. p. to 15 sq. ft. . . .
4	Theatre	Do. .	1 c. p. to 20 sq. ft. Stage lighting as required.
5*	Caterer's quarters . .	Do. .	1-25 c. p. and 1-16 c. p. lamp
	(f) Offices.		
1	Staff and Departmental Offices	Authorised .	Normally one fixed light per room not exceeding 1 c. p. per 6 sq. ft. and one table lamp (25 c. p.) for each officers table.

Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5 *d*)	Free allowance of units per mensem per authorised candle power installed	Provision o meters	REMARKS
5	6	7	8
Sunset to lights out	Summer 1°	Necessary for the building	
	Winter 16		
Sunset to 11 P M	Summer 08		
	Winter 09		
Sunset to lights out	*Nil*	Necessary for the building	
At the discretion of the O C Brigade	*Nil*	Necessary	
Sunset to 11 P M	*Nil*	Metered with the main building	(*) When occupied by a soldier on the strength of the unit a free allowance per mensem of ·08 units in summer and ·09 units in winter will be given per authorised c p installed
As required	Summer 06 Winter 09	Necessary	

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed, subject to the use of metallic filament lamps.
1	2	3	4
	(f) Offices—concld.		
2	Offices of Indian Units . .	Authorised only where fans are also authorised.	Normally one fixed light per room not exceeding 1 c. p. per 6 sq. ft. and one table lamp (25 c. p.) for each officer's table.
	(g) Miscellaneous Buildings, etc.		
1	Fencing school . . .	Authorised .	1 c. p. to 15 sq. ft. . . .
2	Fire engine sheds . . .	Not authorised .	....
3	Gymnasium . . .	Authorised .	1 c. p. to 15 sq. ft. . . .
4	Prayer room . . .	Do. . .	1 c. p. to 10 sq. ft. . . .
5	School—		
	(a) Class room for men .	Do. . .	1 c. p. to 6 sq. ft. . . .
	(b) Class room for children	Not authorised .	....
6	Stables	Do. . .	....
7	Bakery—		
	(i) Kneading room . (ii) Oven room or verandah (iii) Yeast room . .	Authorised .	1 c. p. per 10 sq. ft. . .
8	Main gates of Forts and arsenals.	Authorised subject to the approval of the G. O. C.-in-C. in each case.	As deemed necessary by the O. C. station.
9	Mobilisation shed of I. A. S. C.	Do. . .	Ditto . . .
10	Privately owned buildings .	Authorised subject to the conditions laid down in paragraph 8.	...
11	Buildings belonging to Civil Department.	Do. . .	....
12	Churches	Do. . .	....
13	External lighting in military areas not under the control of a Cantonment or Civil Authority.	Authorised subject to the approval of G. O. C. District in each case.	....
14	Street-lighting (in areas not under the control of the military).	Authorised subject to the conditions that no expense to the State is involved.	....

Hospital Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5(*d*)	Free allowance of unit per mensem per authorised candle power installed	Provision of meters	REMARKS
5	6	7	8
As required	Summer 06 Winter 09	Necessary	Cost of installation should not exceed Rs 2 500 in each case
Sunset to lights out	All	Not essential	
Sunset to lights out	All	Not essential	
Do	All	Ditto	
Do	All	Ditto	Light may be concentrated over desks
As required	All	Not essential	
Sunset to Sunrise	All	Not essential	
As determined by the G O C Brigade	All	Ditto	
Not applicable	Nil	Separate meter for domestic and power necessary	
Do	Nil	Ditto	
Do	Nil	Necessary	
	All	Not essential (advisable to have a separate circuit to facilitate switching on and off) The units departments etc, will pay for current used within their lines and the M E S will pay for current used outside the lines	
Not applicable	Nil	Not essential (advisable to meter separate circuits)	

A.—Buildings other than

Item	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(I) A. and I. T. F. Units Buildings		
1	Armouries	Authorised .	1 c. p. to 15 sq. ft. . . .
2	Indoor Parade ground . .	Do. . .	Ditto . . .
3	(a) Q. M. Stores . . .	Do. . .	Ditto . .
	(b) Q. M. Office . . .	Do. . .	1 lamp per officer's table
4	Offices, excepting clerks' office	Do. . .	As required . . . .

Hospital Buildings—*concld*

Maximum number of hours for which light is to be given daily subject to *rule 5(d)*	Free allowance of units per mensem per authorised candle *power installed*	Provision of meters	REMARKS
5	6	7	8
Sunset to 10 P M	Summer 11 Winter 15	Necessary for the building	
Sunset to lights out	All	Ditto	
Sunset to 10 P M	Summer 11 Winter 15	Ditto	
Do	Do	Ditto	
As required	Summer 06 Winter 09	Ditto	

B.—Hospital

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed, subject to the use of metallic filament lamps.
1	2	3	4
	(a) Quarters.		
1	Quarters for commissioned and warrant officers of the Subordinate Medical Department in military employ.	Authorised .	As for departmental commissioned and warrant officers.
2	Quarters for lady nurses .	Do . .	1 c. p. to 6 sq. ft. for 1 sitting room and 1 c. p. to 10 sq. ft. for other rooms.
	(b) For European Troops (contagious and non contagious).		
1	Officers and men—		
	(a) Day rooms . .	Do .	1 c. p. to 25 sq. ft. concentrated as required.
	(b) Officer's wards . .	Do . .	Shaded lamp not exceeding 1 c. p. to 8 sq. ft.
	(c) Men's wards . .	Do. . .	Fixed lamp not exceeding 1 c. p. per 8 sq. ft. and in addition one portable lamp (25 c. p.) and one wall plug to every four beds with a minimum of one per ward.
	(d) Attendant's room .	Do. . .	1 lamp not exceeding 25 c. p. .
	(e) Verandahs, passages and staircases.	Do. . .	As required in each case at the discretion of the O. C. Station.
2	Soldiers families—		
	(a) Wards	Authorised . .	As for item 1 (c) . . .
	(b) Attendants' room .	Do. . .	As for item 1 (d) . . .
	(c) Verandahs, passages and staircases.	Do. . .	As for item 1 (e) . . .
	(d) Quarters for Matrons	Do. . .	As for regimental non-commissioned officers.
3	Contagious diseases—		
	Authorised on applicable scales items 1 and 2 above.		
4	Administrative Block—		
	(a) Room for Assistant Surgeon on duty.	Authorised .	1 lamp not exceeding 25 c. p. .
	(b) Surgery and dispensary	Do. . .	1-25 c. p. lamp and 1 portable lamp 25 c. p. in addition.
	(c) Medical store . .	Do. . .	1-25 c. p. lamp . .

Buildings

Maximum number of hours for which light is to be given daily subject to rule 5(d)	Free allowance of unit per mensem per authorised candle power installed.	Provision of meters	REMARKS
5	6	7	8
From sunset to midnight	Nil	Necessary for each quarter	
Do . .	Summer 1 Winter 1½	Necessary for each block	
Sunset to lights out	All . .	Not essential but one meter per block of buildings should be provided	
At the discretion of O C Hospital.	All	Not essential but one meter per block of buildings should be provided	(b) One portable lamp 25 c p may be provided for every four beds in addition. (c) As a general rule the fixed lamps should be of the bracket pattern fixed on the side walls *General Note* In small hospitals oil lamps of improved pattern will be provided for use in the non punkha season for *all night lighting in wards*. Hurricane lanterns will also be provided as at present
At the discretion of O. C. Hospital.	All .	Not essential but one meter per block of buildings should be provided.	(a) As a general rule the fixed lamps should be of the bracket pattern fixed on the side walls
At the discretion of O C Hospital.	All . .	Not essential but one meter per block of buildings should be provided.	

B.—Hospital

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(b) *European Troops (contagious and non-contagious—concld.*		
	Administrative Block—*contd.*		
	(d) Receiving room . .	Authorised . .	1 portable lamp 25 c. p. for the two.
	(e) Office	Do. . .	
	(f) Storekeeper's Office .	Not authorised .	....
5	Operating Block—		
	(a) Operating theatre .	Authorised .	As required not usually to exceed 1 c. p. per 6 sq. ft.
	(b) Sterilizing room . .		
	(c) Dressing room . .		
	(d) Anæsthetic room .		
	(e) Preparation room .		
6	X-Ray Block—		
	(a) X-Ray room . .	Do. . .	Ditto . .
	(b) Developing room .		
	(c) Store room . .		
	(d) Engine and battery room.		
7	Miscellaneous Buildings—		
	(a) Hospital guard room .	Do. . .	1 c. p. to 15 sq. ft. . .
	(b) Laundry . . .	Not authorised .	....
	(c) Mortuary . . .	Authorised .	1 lamp not exceeding 25 c. p. .
	(d) Storekeeper's stores .	Do. . .	1 portable lamp 25 c. p. .
	(e) Shed for ambulance cars	Not authorised .	....
	(f) Cook-house— .		
	(i) Kitchen . . .	Authorised .	1 c. p. to 15 sq. ft. . .
	(ii) Scullery . . .	Do. . .	
	(g) Latrines . . .	Do. . .	Lamp in each of minimum power available, usually 16 c. p.
	(h) Lavatories . .	Do. . .	
	(i) Urinaries . . .	Do. . .	
	(c) *For Indian Troops and followers.*		
	Officers and Men—		
	(a) Wards . . .	Authorised .	As for item B (b) 1 (c) . .
	(b) Passages and staircases	Do. . .	As for item B (b) 1 (e) . .
2	Administrative Block—		
	(a) Office . . .	Do. . .	1-25 c. p. lamp in each . .
	(b) Surgery or dispensary .	Do. . .	

Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5(*d*)	Free allowance of units per mensem per authorised candle power installed.	Provision of meters.	REMARKS
5	6	7	8
At the discretion of O C. Hospital	All	Not essential but one meter per block of buildings should be provided	
—		——	
As required	All	Ditto	
Do	All	Ditto	
All night when a supply of current can be given	All	Ditto	
As required	All		
At the discretion of O C Hospital.	All		
Sunset to lights out	All	Ditto	
All night when a supply of current can be given	All		
At the discretion of O C Hospital	All	Ditto.	
Do	All	Ditto	

B.—Hospital

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale of illumination ordinarily to be allowed subject to the use of metallic filament lamps.
1	2	3	4
	(b) *European Troops (contagious and non-contagious—concld.*		
	Administrative Block—*contd.*		
	(d) Receiving room . .	Authorised . .	1 portable lamp 25 c. p. for the two.
	(e) Office . . .	Do. . .	
	(f) Storekeeper's Office .	Not authorised .	....
5	Operating Block—		
	(a) Operating theatre .	Authorised .	As required not usually to exceed 1 c. p. per 6 sq. ft.
	(b) Sterilizing room . .		
	(c) Dressing room . .		
	(d) Anæsthetic room .		
	(e) Preparation room .		
6	X-Ray Block—		
	(a) X-Ray room . .	Do. . .	Ditto . .
	(b) Developing room .		
	(c) Store room . .		
	(d) *Engine and battery room.*		
7	Miscellaneous Buildings—		
	(a) Hospital guard room .	Do. . .	1 c. p. to 15 sq. ft. . .
	(b) *Laundry* . . .	*Not authorised* .	....
	(c) Mortuary . . .	Authorised .	1 lamp not exceeding 25 c. p. .
	(d) Storekeeper's stores .	Do. . .	1 portable lamp 25 c. p. .
	(e) *Shed for ambulance cars*	Not authorised .	....
	(f) *Cook-house*— .		
	(i) Kitchen . . .	Authorised .	1 c. p. to 15 sq. ft. . .
	(ii) Scullery . . .	Do. . .	
	(g) Latrines . . .	Do. . .	Lamp in each of minimum power available, usually 16 c. p.
	(h) Lavatories . .	Do. . .	
	(i) Urinaries . . .	Do. . .	
	(c) *For Indian Troops and followers.*		
	Officers and Men—		
	(a) Wards . . .	Authorised .	As for item B (b) 1 (c) . .
	(b) Passages and staircases	Do. . .	As for item B (b) 1 (e) . .
2	Administrative Block—		
	(a) *Office* . . .	Do. . .	1-25 *c. p.* lamp in each . .
	(b) Surgery or dispensary .	Do. . .	

Buildings—*contd*

Maximum number of hours for which light is to be given daily subject to rule 5(*d*)	Free allowance of units per mensem per authorised candle power installed.	Provision of meters	REMARKS
5	6	7	8
At the discretion of O C Hospital	All	Not essential but one meter per block of buildings should be provided	
As required	All	Ditto	
Do	All	Ditto	
All night when a supply of current can be given	All	Ditto	
As required	All		
At the discretion of O C Hospital	All		
Sunset to lights out	All	Ditto	
All night when a supply of current can be given	All		
At the discretion of O C Hospital	All	Ditto	
Do	All	Ditto	

Buildings—*concld*

Maximum number of hours for which light is to be given daily subject to rule 5(*d*)	Free allowance of units per mensem per authorised candle power installed	Provision of meters	REMARKS
5	6	7	8
As required	All	Not essential but one meter per block of buildings should be provided	
All night when a supply of current is available	All		
Sunset to lights out	All		
As required	All		
As required	*Nil*	Necessary	
As required	All	Not essential	

ANNEXURE II

Statement showing the authorised scale of ventilation, etc., (mechanical punkhas or fans) in Government Buildings

NOTE —Wall plugs may also be provided in addition to the scale laid down, at the discretion of the O C Station, in hospitals and metered buildings such as quarters in which portable fittings are usually required though not provided by Government

The numbers in column I correspond to those in Annexure I

If a meter is provided for lighting this meter will normally suffice for registering energy used for ventilation as well

The free allowance figures have been calculated on the following principles which should be adopted in cases not provided for in the scales —

(i) A month is calculated a 30 days

(ii) A fan requires 100 watts and so the number of units per hour for each authorised fan is 0 1

(iii) Electrically driven punkhas require 2 watts per running foot and so the number of units per running foot per hour is 0 002

(iv) The rate is calculated on the assumption that each authorised fan will be used on an average for the following percentages of the full authorised number of hours —

(a) In case of offices 100 per cent

(b) In case of quarters except as stated below 50 per cent

(c) In case of other buildings and quarters which have only one fan 75 per cent

(v) In the case of punkhas use for the full authorised hours is allowed in all cases Fans and punkhas up to the full authorised scales will be provided in only those quarters barracks or part of the same which will in the opinion of O C Station be normally fully occupied during the hot weather Quarters not used during the summer due to married families being sent to the hills will not be provided with fans

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(iv) The rate is calculated on the assumption that each authorised fan will be used on an average for the following percentages of the full authorised number of hours —

(a) In case of offices 100 per cent

(b) In case of quarters except as stated below 50 per cent

(c) In case of other buildings and quarters which have only one fan 75 per cent

(v) In the case of punkhas, use for the full authorised hours is allowed in all cases Fans and punkhas up to the full authorised scales will be provided in only those quarters barracks or part of the same which will in the opinion of O C Station be normally fully occupied during the hot weather Quarters not used during the summer due to married families being sent to the hills will not be provided with fans

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised.	MAXIMUM ALTERNATIVE SCALE OF INSTALLATION TO BE ALLOWED.	
			Punkhas.	Fans.
1	2	3	4 (*a*)	4 (*b*)
	(*a*) *Quarters and Messes, etc.*—concld.			
6	Power House employés.	Not authorised .	..	....
7	Military Engineer Services *Inspection* House.	Authorised subject to the approval of the G. O. C.-in-C. in each case.	..	As deemed necessary by the O. C. Station.
	(*b*) *Barracks for British Troops.*			
1	For married rank and file.	Authorised .	As required .	As deemed necessary by the O. C. Station but not to exceed one fan per man's living room and bedroom.
2	For single men—			
	(*a*) Dormitories .	Do. .	1 for 2 beds .	1 fan to 2 beds . .
	(*b*) Day rooms or dining halls.	Do. .	As required .	To cover tables only, not exceeding 1 fan to 24 men.
	(*c*) Quarters for single serjeants.	Do. .	Do. .	1 fan . .
	(*d*) Verandahs, passages and staircases.	Not authorised	....	....
	(*e*) Cook-house. .	Authorised .	....	1 fan . . .
	(*f*) Lavatories, latrines and urinaries.	Not authorised	....	....
	(*c*) *Barracks for Indian Troops.* Not authorised.			
	(*d*) *Regimental Buildings for British Troops.*			
1	Armourer's shop .	Authorised .	As required .	1 fan . . .
2	Blacksmith's forge and workshop.	Do. .	Do. .	1 „ . . .
3	Night picquet guard room.	Do. .	1 for 2 men .	1 fan for 2 men . .
4	Orderly and court-martial room—			
	(*a*) Orderly room .	Do. . (for (*a*) and (*b*))	As required .	1 fan to 400 sq. ft. of floor area. (for (*a*) to 5)
	(*b*) Officer's waiting room and clerk's room or court-martial room.			
	(*c*) Officer's room .	Do. .	Do. .	1 fan . .
5	Pay Office . .	Do. .	Do. .	1 „ . .

Hospital Buildings—contd

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed	Provision of meters	REMARKS
5	6	7	8
		...	
As required	*Nil*	*Necessary*	
At the discretion of the O C Brigade	36	Do	
20 hours	All	Not essential.	
10 hours			
20 hours			
	...	...	
As required	All	Not essential	(e) If used by European cooks during hot weather
	...	...	
6 hours	All	Not essential	
6 hours	All		
20 hours)	All)		
6 hours	*Nil* except in orderly rooms of batteries and *companies of* Royal Artillery which receive 18 units	Necessary for each set of offices	
6 hours	*Nil*	Do	

A.—Buildings other than

Item.	Buildings	Installation authorised or not authorised.	MAXIMUM ALTERNATIVE SCALE OF INSTALLATION TO BE ALLOWED	
			Punkhas.	Fans.
1	2	3	4 (a).	4 (b).
	(b) Regimental Buildings for British Troops—contd.			
6	Quarter guard and detention rooms—			
	(a) Guard-room .	Authorised .	1 for 2 men .	1 fan for 2 men .
	(b) Guard detention room.			
	(c) Barrack detention room.	Do. .	1 [illegible] per cell where it is found more economical to install punkhas than to keep portable fans for the purpose.	One wall plug per room may be wired in the passage or verandahs
7	[illegible]			
	(a) [illegible] .	Not authorised	...	...
	(b) [illegible] Workshop .	Authorised .	As required .	1 fan . . .
	(c) [illegible] .	Do. .	Do. .	1 „ . . .
	(d) [illegible] .	Not authorised	....	....
8	[illegible] .	Authorised .	As required .	1 fan for each shop .
9	[illegible] . .	Authorised subject to the approval of the G. O. C. the [illegible]	Do. .	1 fan to 400 sq. ft. of floor area.
10	[illegible]	Do.	Do. .	1 fan to 500 sq. ft. of floor area.
11	[illegible] installation .	Authorised .	Do. .	1 fan to 400 sq. ft. .
	(c) Institutes.			
1	[illegible] portion—			
	(a) Private's room .	Authorised .	As required .	1 fan to 400 sq. ft. of floor area.
	(b) Bar or issue room	Do. .	Do. .	1 fan . . .
	(c) Beer store . .	Not authorised	....	....
	(d) Corporal's rooms	Authorised .	As required	1 fan to 400 sq. ft. of floor area.
2	Library portion—			
	(a) Reading room .	Do. .	Do. .	1 fan to 400 sq. ft. of floor area
	(b) Writing room .			
	(c) Book room .			
	(d) Librarian's quarters.	Do. .	Do. .	1 fan . . .

Hospital Buildings—*contd*

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed.	Provision of meters	REMARKS
5	6	7	8
"0 hours	All	Not essential	* Portable fans will be supplied up to the average No of cells in use during the hot weather and where specially order d by the O C
...			
...	...	...	
6 hours	All	Not essential	
...	...	...	
6 hours	All	Not essential	Including voluntary workshop
4	1"	Do	
6 hours	18	Do.	Distr but on of fans to be settled locally between the M E S and Art ller co cerned
As required	All	Do.	
At the discretion of the O C Bri'ade	All	Necessary for the building	
8 hours	18	Necessary for the building	
"0	45		

A.—Buildings other than

Item.	Buildings.	Installation authorised or not authorised.	Maximum alternative scale of installation to be allowed.	
			Punkhas.	Fans.
1	2	3	4 (a)	4 (b)
	(e) Institutes—contd.			
3	Recreation and Refreshment portion—			
	(a) Hall . . .	Not authorised	....	....
	(b) Temperance room	Authorised .	As required .	1 fan to 400 sq. ft. of floor area.
	(c) Games room .			
	(d) Billiard room .			
	(e) Corporal's room .			
	(f) Supper room .			
	(g) Supper lounge room			
	(h) Beer and liquor bar			
	(i) Grocery bar .			
	(j) Office . .			
	(k) Store . .	Not authorised	....	....
	(l) Lavatory . .			
	(m) Cookhouse .			
4	Theatre . . .	Authorised .	As required .	1 fan to 400 sq. ft. of floor area.
5	Caterer's quarters .	Do .	Do. .	1 fan . . .
	(f) Offices			
1	Staff and departmental offices.	Authorised. .	As required .	1 fan for 400 sq. ft. with a minimum of one fan per working room.
2	Offices of Indian Units	Authorised, at stations where necessary in the hot weather.	....	
	(g) Miscellaneous Buildings, etc.			
1	Fencing school . .	Not authorised	....	....
2	Fire engine sheds .	Do. .	....	....
3	Gymnasium . .	Authorised in dressing room only.	As required .	1 fan . . .
4	Prayer room . .	Authorised .	Do. .	1 fan to 400 sq. ft. of floor area.
5	School—			
	(a) Class room for men.	Do .	Do. .	1 fan to 400 sq. ft. of floor area.
	(b) Class room for children.			
6	Stables . .	Not authorised	....	....

Hospital Buildings—*contd*

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed	Provision of meters	REMARKS.
5	6	7	8
--	--	--	
8 hours	18	Necessary for the building	
As required No limit	Nil	Necessary	
20 hours	Nil	Metered with the main building	When occupied by a soldier on the strength of the unit a free allowance of 45 units per mensem will be given
6 hours	18	Necessary	
6 "	18	Do.	The cost should not exceed Rs 2 500 in each case
10 hours	All	Not essential	Only where electric light is also installed
6 "	All	Do	
6 "	All	Do	

A.—Buildings other than

Item	Buildings.	Installation authorised or not authorised.	Maximum alternative scale of installation to be allowed.	
			Punkhas.	Fans.
1	2	3	4 (a)	4 (b)
	(g) Miscellaneous Buildings, etc.—concld.			
7	Bakery . . .	Not authorised .	....	....
8	....	....	....	....
9	Mobilisation sheds of I. A. S. C.	Not authorised .	....	....
10	Privately owned buildings.	Authorised, subject to conditions laid down in para. 8.	....	Not applicable . .
11	Buildings belonging to Civil Dept.	Do. .	....	Do. . .
12	Churches . . .	Do. .	....	Do. . .
	(h) A. & I. T. F. Units Buildings.			
1	Armouries . .	Not authorised	....	....
2	In-door parade ground	Do. .	....	....
3	(a) Q. M. Stores	Do. .	....	....
	(b) Quartermaster's office.	Authorised .	....	1 fan . . .
4	Offices, excepting clerks' office.	Do. .	As required .	1 fan for each office

Hospital Buildings—*concld*

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed.	Provision of meters	REMARKS
5	6	7	8
	Nil	Necessary	
	Nil	Do	
	Nil	Do	
6 hours	All	Not essential	
6 ,,	18	Necessary	

B.—Hospital

Item.	Buildings.	Installation authorised or not authorised.	Maximum alternative scale of installation to be allowed.	
			Punkhas.	Fans.
1	2	3	4 (a)	4 (b)
	(a) Quarters.			
1	Quarters for Commissioned and Warrant Officers of the Subordinate Medical Dept. in military employ.	Authorised .	As required .	Not exceeding 1 fan per main living room and bed room.
2	Quarters for lady nurses.	Do. .	Do. .	1 fan for each main room.
	(b) For European Troops (contagious and non-contagious).			
1	Officers and men—			
	(a) Day rooms .	Do. .	Do. .	1 fan for 400 sq. ft. of floor area.
	(b) Officers' wards .	Do. .	Do. .	1 fan for each bed
	(c) Men's wards .	Do. .	1 per bed .	1 fan for 2 beds .
	(d) Attendant's room	Do. .	1 punkha .	1 fan . . .
	(e) Verandahs, passages and staircases.	Not authorised	....	....
2	Soldiers and families—			
	(a) Wards . .	Authorised .	1 per bed .	1 fan for 2 beds .
	(b) Attendant's room	Do. .	1 punkha .	1 fan . .
	(c) Verandahs, passages and staircases.	Not authorised	...	....
	(d) Quarters for matron.	Authorised .	As required .	2 fans . . .
3	Contagious diseases—			
	(Authorised on applicable scales items 1 and 2 above.)			
4	Administrative Block—			
	(a) Room for Asst. Surgeon on duty.	Authorised .	1 punkha .	1 fan . . .
	(b) Surgery and dispensary.			
	(c) Medical store .	Not authorised	....	....
	(d) Receiving room	Authorised .	As required .	1 portable fan .
	(e) Office . .			1 fan . . .
	(f) Store-keeper's office.			1 portable fan .

Buildings.

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed	Provision of meters	REMARKS
5	6	7	8
As required. No limit.	All . .	Necessary for each quarter	
As required. No limit	30	Necessary for each block.	
At the discretion of O C, Hospital	All	Not essential but one meter per block of buildings should be provided	One portable fan may be provided per ward.
At the discretion of O C, Hospital.	All	Not essential but one meter per block of buildings should be provided	One portable fan may be provided per ward.
At the discretion of O C, Hospital . .	All . . .	Do.	
6 hours . .			

B.—Hospital

Item.	Building.	Installation authorised or not authorised.	Maximum alternative scale of installation to be allowed.	
			Punkhas.	Fans.
1	2	3	4 a	4 b
	(b) *For European Troops (combatant and non-combatant)—contd.*			
5	Operating Block—			
	(a) Operating theatre	Authorised	As required	As required
	(b) Sterilizing room			
	(c) Dressing room			
	(d) Anaesthetic room			
	(e) Preparation room			
6	X-Ray Block—			
	(a) X-Ray room	Do	Do	Do
	(b) Developing room			
	(c) Store room			
	(d) Engine and battery room.			
7	Miscellaneous Buildings—			
	(a) Hospital guard room.	Do	1 for 2 men	1 fan per 2 men
	(b) Laundry	Not authorised	....	....
	(c) Mortuary	Authorised	1 swinging only*	....
	(d) Storekeeper's stores.	Not authorised	....	....
	(e) Sheds for ambulance cars.	Do.	....	....
	(f) Cook-house—			
	(i) Kitchen	Authorised	....	1 fan
	(ii) Scullery			
	(g) Latrines	Not authorised	....	....
	(h) Lavatories			
	(i) Urinaries			
	(c) *For Indian Troops and followers.*			
1	Officers and men—			
	(a) Wards	Authorised	As required	1 fan for 4 beds
	(b) Passages and staircases.	Not authorised	....	....

Buildings—*contd*

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed	Provision of meters	REMARKS
5	6	7	8
As required	All	Not essential but one meter per block of buildings should be provided	
Do	All	Do	
20 hours	All	Do	
As required	All	Not essential but one meter per block of buildings should be provided	* Portable fan from one of the wards to be used
As required	All	Not essential but one meter per block of buildings should be provided	(f) To be provided only if used by European cooks during hot weather
At the discretion of O C Hospital	All	N	

B.—Hospital

Item.	Buildings.	Installation authorised or not authorised.	MAXIMUM ALTERNATIVE SCALE OF INSTALLATION TO BE ALLOWED.	
			Punkhas.	Fans.
1	2	3	4 (a)	4 (b)
	(c) *For Indian Troops and followers*—concld.			
2	Administrative Block—			
	(a) Office . .	Authorised in administrative office only.	As required .	1 fan . . .
	(b) Surgery or dispensary.	Authorised .	Do. .	1 fan . . .
3	Operating and X-Ray Block.	Do. .	Do. .	As required . .
4	Miscellaneous Buildings—			
	(a) Latrine . .	Not authorised	....	....
	(b) Cook-house .	Do. .	....	....
	(c) Mortuary . .	Authorised .	1 wall plug only*	....
	(d) *Veterinary.*			
1	Office, pharmacy and orderlies' room only.	Authorised .	As required	1 portable fan each .
	(e) *Miscellaneous.*			
1	District or Brigade Laboratory.	Authorised .	As required	1 fan per 400 sq. ft. .

Buildings—*concld*

Maximum number of hours power to be allowed daily	Free allowance of units per mensem per authorised fan installed.	Provision of meters	REMARKS
5	6	7	8
6 hours	All	Not essential but one meter per block of buildings should be provided	
At the discretion of O C, Hospital	All		
As required	All	Do	
*	—		
As required	—	Not essential	* Portable fan from one of the wards to be used
As required	Nil	Necessary	
As required	All	Not essential	

ANNEX

Statement showing the Authorised Scale of Heating (Electric Radiators) and

Item.	Buildings.	Installation authorised or not authorised.	Maximum scale ordinarily to be allowed.
1	2	3	4
	(a) HEATING. *British Station Hospital.*		
1	(a) Operating room . .	Authorised	2 radiators of about 3 K. W. capacity.
	(b) Anæsthetising room .	Do.	Do.
	(b) MOTIVE POWER.		
1	Military buildings requiring electric energy for power purposes.	Authorised subject to the approval of the G. O. C., and on the C. R. E.'s certificate that the existing plant can take the extra load and that only the expenditure on the actual connection and meter is charged to the project for the electrification of the station.	As required .
	(c) CONNECTIONS FOR THE SUPPLY OF ELECTRIC ENERGY TO OPTICAL LANTERNS AND CINEMAS USED FOR EDUCATIONAL PURPOSES.		
1	Military buildings requiring connections.	Authorised subject to the approval of the G. O. C. District in each case.	As required .

URE III.

of Motive Power for Driving Machinery, etc., in Military Buildings.

Maximum number of hours power to be allowed daily	Free allowance of units per mensem	Provision of meters	REMARKS.
5	6	7	8
As required .	All .	Separate meter not essential	Authorised only where supply is available without requiring any plant to be run specially for radiators
As required .	All except where there are orders to the contrary, i e Farm, R A F, etc	Necessary	
As required .	All .	Necessary . .	Authorised only for lantern or cinemas provided by competent financial authority where energy is available without necessitating plant to be installed specially

ANNEXURE IV.

Table showing classes of consumers who are required to pay for all or part of the electricity consumed by them.

Class 1.	Class 2.	Class 3.
All electricity paid for.	*All electricity paid for.*	*Electricity allowed free in part, the remainder paid for.*
Buildings not belonging to Government which are connected to [illegible] and supplied by the M. E. S. [illegible]	Government buildings occupied by	Government buildings occupied by
Lighting— 1.	Commissioned Officers.	Regimental and Non-Departmental Warrant and Non-Commissioned Officers, married rank-and-file, and Deptl. N. C. Os. of the I. U. L. [illegible] in receipt of consolidated rates of pay.
	Honorary Commissioned Officers.	----
	Deptl. Warrant and Non-Commissioned Officers in receipt of consolidated rates of pay.	School mistresses.
	Commissioned and Warrant Officers of the Indian Medical Dept.	Lady Nurses.
	Officers' Messes.	Libraries of Regimental Institutes.
	Institutes, including the theatres and [illegible], but excluding the library which is [illegible].	Sergeants' Messes and Refreshment rooms.
		Power-house employés of the M. E. S. electrical installations (other than supervising establishments) accommodated in quarters in the vicinity of the power-house.
	Offices of Indian units, Orderly and Court-martial rooms and pay offices.	Staff and deptl. offices.

ANNEXURE IV—*concld.*

Table showing classes of consumers who are required to pay for all or part of the electricity consumed by them.

Class 1	Class 2	Class 3
(All electricity paid for)	*(All electricity paid for.)*	*(Electricity allowed free in part, the remainder paid for)*
Buildings not belonging to Government to which a connection has been sanctioned by the G. O C District	Government buildings occupied by	* Government buildings occupied by
Punkhas or fans—All .	Commissioned Officers	Regimental and Non Deptl Warrant and Non Commissioned Officers, married rank and file, and Deptl. N C Os of the I U L. not in receipt of consolidated rates of pay.
	Honorary Commissioned Officers	....
	Deptl. Warrant and Non Commissioned Officers in receipt of consolidated rates of pay	Schoolmistresses
	Commissioned and Warrant Officers of the Indian Medical Dept.	Lady Nurses
	Officers' Messes . .	Libraries of Regimental Institutes
	Liquor bars of Regimental Institutes	Recreation and Refreshment rooms of Regimental Institutes, *excluding the Theatre (Class 2)*
	Theatres of Regimental Institutes	Quartermaster's office and tailor's shop
	Orderly and Court martial rooms (except orderly rooms of Batteries and Companies, Royal Artillery)	Serjeant's Mess and Recreation Rooms
	Pay Offices . . .	Orderly rooms of Batteries and Companies of Royal Artillery
		Staff and Deptl Offices
	Veterinary Hospitals . .	....

ANNEXURE V.

Conditions for connection of buildings of the Civil Dept. to M. E. S. Electric Supply System.

Rights and duties of the owner of the building (the Local Government) :—

(*a*) To lay and maintain the supply lines, which will be the property of the Local Government, who will bear the cost of maintenance.

(*b*) To erect and maintain the internal installation in the house and house service lines.

(*c*) Before any work for the use of energy in or to the building is commenced, the P. W. D. to give notice to the local M. E. S. authorities and to obtain their concurrence.

(*d*) To give notice to the local M. E. S. authorities of an intention to discontinue the use of energy.

(*e*) Any point of dispute locally between the P. W. D. and the M. E. S. to be referred to the E.-in-C. for decision.

Rights and liabilities of the tenants :—

(*a*) To be supplied monthly by the M. E. S. with the meter readings.

(*b*) To pay according to such readings, within one month after receipt of the readings, at six annas per Board of Trade Unit for electrical energy supplied.

(*c*) If the meter ceases or omits to register accurately or is otherwise unavailable for registering the supply, payment for energy supplied during such period to be a proportionate one based on subsequent readings of a substituted meter.

(*d*) If a consumer doubts the accuracy of his meter he may, on deposit of the sum of Rs. 5 for each occasion, require the local officer of the M. E. S. to test the meter. If by this test the meter is found to be inaccurate, the deposit will be returned to the consumer, and the bill for the current month adjusted. If, on the other hand, the meter is found to be accurate, the deposit of Rs. 5 shall be forfeited. A meter shall be deemed to be accurate when it is found to register within 3 per cent. of the actual energy supplied.

ANNEXURE VI

Conditions of sanction for privately-owned electrical installations in M E S. buildings including (*a*) installations erected and owned by occupants, and (*b*) installations hired by occupants and owned by Electricity Supply Companies

1 The installation shall be erected in accordance with the attached specification, schedule plan and estimate No alteration is to be made without the sanction of the E in C

NOTE —The estimate is to be divided into 2 parts—

I Fixtures

II Fittings

2 The installation is to be erected and maintained in conformity with the wiring rules of the Institution of Electrical Engineers and to the satisfaction of the C R E as regards workmanship, materials, fire risk, etc

If the installation is not so erected or maintained the C. R E may call on the owner to remove the installation and make good all damage to the building to his satisfaction within one week of the receipt of written orders to that effect

3 If the owner desires to remove the fixtures, one month's notice in writing must be given to the C R E in order that he may decide whether Government wish to exercise their option of purchase (*vide* paragraph 4)

4 The G of I are to have the option to purchase either the fixtures or the complete installation at any time at a price to be fixed by agreement

5 If the fixtures are removed the owner shall make good all damage to the building etc , to the satisfaction of the C R E within one week of the removal or alternatively shall pay the actual cost of so making good to the C R. E The owner shall also remove any poles, cables, or external wiring which have been erected for the service line and make good damages after the removal.

[illegible]

current by the occupants

I agree to be bound by the above conditions and request that sanction may be given to the erection of the installation accordingly

Signature of owner

NOTE 1 —The term "owner" as used above means the occupant of the building in case (*a*) where the occupant instals and pays for the installation outright, it means the Supply Company in case (*b*) where the occupant arranges with the Supply Company for an installation on the line system, the installation remaining the property of the Supply Company

NOTE 2 —As a rule the value to Government of the fixtures as they stand will be considerably greater than the value to the owners of the materials less the labour of dismantling, and making good and therefore there should be no difficulty in arriving at a mutually satisfactory price in the event of purchase of the installation by Government under clause (4)

ANNEXURE VII.

Rules for Electrical Installations in Churches.

(*a*) Questions relating to the provision and maintenance of electric light and ventilation in churches in cantonments will be dealt with by the G. of I. in the Dept. of Commerce, under the Ecclesiastical Rules except as regards the Cantonment Churches at Fort William, Jhansi, Bareilly and Attock.

(*b*) Should the cost of installing electricity for lighting and ventilation exceed the permissible grant the excess must be met from church funds or private subscriptions.

(*c*) Each case will be considered on its merits, but the following scales are given to serve as a rough guide in the preparation of schemes for ecclesiastical installations :—

(i) *Lighting.*—Two candle-power per sitting; one lamp for each porch, and one for the vestry. The lights should ordinarily be arranged so as to ensure a good illumination in the chancel and over the sittings, the remainder of the church being less brilliantly illuminated.

(ii) *Ventilation.*—One fan for 30 sittings; in addition one ceiling fan for the vestry, and one fan each for the pulpit and organ loft, if required. Punkhas, when adopted, will be supplied with such fittings as may be necessary.

(iii) The grants given from State funds for lighting and ventilation in churches are stated in App. C of the Ecclesiastical Rules.

ANNEXURE VIII

Conditions for the extension of M. E. S mains to serve private buildings

Expenditure may be incurred on extensions of mains of M E S electrical installations to private buildings in cantonments subject to the following conditions :—

(a) Govt. is under no obligation to give a supply to any private building or premises.

(b) In the case of service lines Govt. will pay the whole cost of the connection up to a length of 200 ft The cost of any additional length beyond 200 ft will be paid by the owner of the premises served.

(c) In the case of the extension of a distributor Govt will bear the whole cost of the extension provided that its length does not exceed—
500 yards if it serves not less than 5 services lines,

400	"	"	"	4	"	"
300	"	"	"	3	"	"
200	"	"	"	2	"	"

provided also that all the owners of the premises served agree to use and pay for current consumed for four years with a minimum charge of five rupees (Rs. 5) per mensem.

If the extension is longer than the above but other conditions are fulfilled, Govt. will pay for the lengths named above and the owners of the premises served will pay for any additional lengths

(d) Notwithstanding the above the whole of the lines, both distributors and service lines, shall become the property of and be maintained by, Govt who will not however remove them so long as they are needed to supply current to the premises.

(e) In the case of a proposed extension of a distributor a report giving the following particulars shall be submitted to the C E for consideration before sanction is accorded —

(i) The estimated cost of the extension.

(ii) The kilowatts to be installed by the various consumers

(iii) The probable consumption of energy per annum.

(iv) Whether the distributor is likely to serve other consumers in the future

(v) Whether the necessary power is available

Each case will be considered on its merits and no extension of a distributor will be sanctioned if it appears likely to cause loss to Govt

(f) For the purposes of the above the following definitions shall apply —

A service line is a line supplying one and only one building or consumer

A distributor is a line supplying more than one service line

APPENDIX G.

(Referred to in paragraph 87.)

Rules for M. E. S. Water Supplies.

1. **Outlay.**—Outlay or capital expenditure will include all expenditure incurred on the complete supply including dams, wells and drawing gear, channels, buildings, pumping plant, machinery, filtering plant, piping, reservoirs, tanks and the distribution system including stand pipes, meters and house connections and fittings for authorised domestic services in those Govt. buildings for which the M. E. S. are responsible, and in quarters for staff, etc.

All additions and alterations which are of the nature of capital expenditure will be adjusted against the capital account.

All capital expenditure on account of house connections and fittings to buildings will be shown on completion in the capital registers of the buildings. All other capital expenditure will remain on the registers of the water supply installations.

2. **Maintenance and Operation expenses.**—The cost of materials at site will be booked against the annual maintenance and operation estimate: also the following maintenance and operation expenses :—

(i) Payments for water supplied by municipalities or other local bodies.

(ii) Salaries and wages of all personnel solely employed in the pump house, on the operation of the plant and in the control of the distribution system.

(iii) The cost of all materials used, including fuel, oil, sand, or gravel, etc., for filtering purposes; also charges for electrical energy, if any.

(iv) The cost of upkeep, *e.g.*, repairs to dams, wells, channels, buildings, pumping plant, machinery, filtering plant, piping, reservoirs, tanks and distribution including stand pipes and meters, also quarters for staff.

NOTE (*a*).—The cost of renewals to buildings, plant, etc., will be dealt with in accordance with the orders in para. 83.

NOTE (*b*).—The cost of upkeep of house connections and fittings in Government buildings used for authorised purposes is charged to the minor head "Repairs and Renewals."

(v) Pay and all incidental charges in connection with establishment, clerical or otherwise, other than M. E. S., engaged in the supervision and check of the distribution of water and in the reading and check of meters or similar contrivances.

3. **Disposal of recoveries.**—The recoveries will be made through the agency of the M. E. S. and the sums realised will be credited to the head XXXVIII.—M. E. S. Revenue, except that in the case of M. E. S. water supplies in cantonments, the recovery will be made through the Cantonment Authority (reference section 234 of Cantonments Act, 1924). Details regarding the procedure to be followed in all cases are given in M. E. S. Account Code.

4. **Authorised connections.**—(*a*) Piped water supplies will be laid on to barracks, hospitals, cook-houses and other military buildings, where water is required for drinking purposes and also to lavatories and to plunge baths, where authorised.

(*b*) Water may be laid on to grass or dairy farms; but the farms will be debited with the cost of all water used, at the rate chargeable to individuals.

Piped water should, as a rule, be supplied to grass farms for the use of the staff only.

(*b*) Local scales for the supply of water for domestic purposes (*i e*, for drinking, cooking and washing) will be sanctioned by G. O C. Dist for each station in the district area subject to the following restrictions —

(i) That the expenditure on the supply of the quantities of water authorised can be financed from funds available locally

(ii) That the scales provide the minimum consistent with the health and comfort of the troops, regard being had to the local climatic conditions

(iii) That maximum scales are only sanctioned when water can be made available in abundant quantities at little or no extra cost, *e g*, gravity supplies

(iv) That the scales are based on the general type scales given in sub-para (*e*) below.

(*c*) It is to be clearly understood that units, etc, cannot demand a supply up to the scale prescribed by the G O C District Circumstances may render such a supply impossible at times

(*d*) G O C. Districts will be responsible that the troops under their command are always supplied with at least the absolute minimum of water required for domestic use In case of failure of the main supply, they are authorised to ensure the minimum supply by arranging for the transport of water from other sources or, in the last resort, by moving the troops to other areas

(*e*) The following are the scales for the supply of water for domestic purposes, in gallons per diem, referred to in sub para (*b*) (iv) above —

Class	Absolute minimum consistent with health.		Normal quantity		Absolute Maximum.
	Hot season in plains	Hills	Hot season in plains	Hills.	
British officers, warrant officers, rank and file living in quarters, also the wives and adult members of their families, lady nurses and all persons ranking as such.	6	4	40	20	50
British non-commissioned officers, British other ranks living in barracks and all persons ranking as such	4	3	24	16	30
Indian officers, Indian rank and file living in quarters also the wives and adult members of their families and all persons ranking as such	3	2	10	8	[illegible]
Indian rank and file living in barracks and all persons ranking as such	2½	2	8	5	[illegible]
Followers including the wives and adult members of their families	2½	2	6	4	[illegible]
Animals (horses, mules, etc)		..	12	[illegible]	[illegible]

NOTE 1 —In each class the scale for children to be [illegible] for adults

6. **Entitled and non-entitled persons.**—(*a*) Water taxes or rates are generally paid by the occupiers and they should be levied on officers and others to whom the State does not undertake to supply water free, whether they occupy quarters provided by the State or not, and in this connection it is immaterial whether the quarters are actually the property of the State or are rented by the occupier.

(*b*) No person is entitled to a free supply of water for irrigation purposes at State expense.

(*c*) Persons of the following classes should be held to be entitled to a free supply at the expense of the State and therefore be exempted from payment of water rates and taxes :—

Class I.—

(i) All British and Indian troops and their families.
(ii) Military sub-assistant surgeons and their families.
(iii) All followers, whether regimental or departmental, who are paid by Government, and their families.

Class II.—If residing, not as a matter of convenience but under the rules of their service, in quarters provided rent free by Government.

(i) Departmental officers and departmental warrant and non-commissioned officers and their families.
(ii) Departmental and warrant officers of the I. M. D. and their families.
(iii) Warrant and non-commissioned officers on I. U. L. not in departmental employ and their families.

Class III.—All personnel such as office establishments, peons, departmental labour, badraggas, etc., not specifically otherwise mentioned when paid from Army estimates—

(*a*) at all times, if entitled to free accommodation at State expense.
(*b*) during working hours only, if not entitled to free accommodation at State expense.

NOTE.—The cost of water consumed by badraggas, etc., paid for from civil estimates should be charged to these estimates.

Class IV.—Lady Nurses of the Military Nursing Services.

Class V.—A civilian subordinate of the Ordnance Department who is entitled to free quarters and occupies public quarters or quarters hired for him by the State is required to pay only such portion of the water tax as may not be in excess of the tax leviable on a rental equal to one-tenth of his gross salary—any excess being borne by the State; except that when water is charged for by the quantity consumed, as measured by a meter, the subordinate will pay for the whole cost of the water consumed.

Class VI.—

(i) Soldiers' Homes or Institutes when recognised as such by the G. O. C. are entitled to a free supply of water.
(ii) Regimental dairies and soda water factories which are run as regimental institutes should get water free but those which are worke by a contractor or by the A. C. B. (I), who alone derives benefi by the profits, should pay for water used.

Class VII.—Classes I, II and VI of the Auxiliary and Territorial forces on duty.

(*d*) The cost of the free supply of water including the water tax or rat levied by municipalities, etc., on the above-mentioned classes will be pai by the M. E. S. as a charge against 50.—M. E. S. in the first instance.

(*e*) The M. E. S. will recover from partially entitled consumers direct that portion of the cost which is to be borne by the partially entitled sumer and from units and departments, etc., for the full amount charg to the State according to the cost accounting rules in force.

(f) In the case of civilian subordinates of the Ordnance Department and other partially entitled consumers, when in occupation of quarters either public or hired by the State, only the actual amounts of water tax recoverable from the occupants under rules will be recovered by the Cantonment Authority for ultimately crediting to XXXVIII—Revenue The M. E S will, however, arrange recovery of the balance of the water tax according to cost accounting rules in force

7 **Regulation of the supply of water**—(a) Except in cases of shortage when control becomes essential water will be turned on during the whole 24 hours of each day

(b) The O C Brigade Area will be responsible that due economy is exercised in the use of water by the troops under his command.

(c) The M E S are responsible for the technical management of the water supply system in their charge and are responsible for bringing to notice of the Brigade Commander any instances of what they consider are undue consumption waste or insufficient taxation of non entitled persons.

8 **Rules regarding the fixing of water rates, etc, in military stations**—When submitting proposals for a schedule of rates for the supply of water in military stations, the following rules will be observed —

(a) The rate levied may be fixed at the maximum legal rate of any water tax leviable on occupied buildings in the province in which the station is situated, subject to the following limitations —

(i) Generally, it shall not be in excess of that levied in an adjoining municipality

(ii) It should not be fixed at a higher rate than would give a fair return on capital outlay (interest) and cover full depreciation charges and maintenance and operation expenses based on the proportion of water supplied to those persons who are not entitled to a free issue at the expense of the State

(b) The water rate on the rentable value of buildings shall also be subject to —

(i) The limits or modification in regard to varying distances of buildings from stand pipes, etc., in force in the province

(ii) The condition that this rate covers a supply of water considered fair and reasonable for domestic purposes Any water consumed in excess of this amount shall be paid for at the approved rate per 1,000 gallons.

(c) The determination of the proportion of interest and depreciation charges and maintenance and operation expenses to be charged to persons entitled and non entitled to a free supply at the expense of the State, respectively, shall be calculated on the basis of the average population, as nearly as it can be estimated, of each class, throughout the year and on an assumed consumption of water by individuals

9 **Non-military connections**—(a) Private buildings may be connected with the water supply system, but the terms under which the connection is made and the practicability or otherwise of granting permission for the connection will be settled locally under the orders of the G O C District

(b) Departmental charges for establishment, tools and plant (including 1½ per cent for audit charges) will be levied at the reduced rate given in para 30

10 **Water supplies for mobilization camps, etc.**—All water supply works connected with mobilization camps and railway sidings should as a general rule, be tested and inspected by the M E S

In cases in which the necessary works cannot, in the opinion of the C. E., be conveniently executed by the M. E. S., the inspection and testing will be carried out by the railway authorities concerned and debited to head 50.—M. E. S.

11. **Wells.**—(*a*) Covers will be provided for all wells the water from which is used for drinking or cooking purposes.

All wells should have a raised masonry platform round them with a masonry drain to carry off the water. If however there is no platform, a protecting wall should be constructed to prevent the ingress of surface water and to avert accidents.

(*b*) In order to effect economy in the drawing of water from wells, the G. O. C. District should periodically review each case on its merits, and where it is found to be more economical to substitute pumps suitable for bullock or mechanical power, the necessary work may be carried out, as funds permit.

12. **Responsibility for the purity of water and the supply of purifying materials.**—The M. E. S. will be responsible for all filtration plant in the case of complete installations where filtration is done by sand filters, sedimentation, pressure or gravity filters or any other mechanical means including pressure chlorinating apparatus. The medical authorities in these cases will be responsible for testing the water and bringing to the notice of the local M. E. S. when they consider the water is not being adequately purified.

In case of small installations where water is only chlorinated by adding liquid chlorine, by direct or automatic chlorinators, etc., the medical authorities will be responsible for providing all the necessary reagents. The M. E. S. will be responsible for any necessary apparatus.

APPENDIX H.

(Referred to in para 101)

List of articles of M. E S supply of Barrack and Hospital Furniture.

NOTE —The list does not include articles of normal I A O C supply which are supplied by the M E S in certain cases, see para 101 (o)

Index No	Nomenclature	General dimensions	Reference to plan issued by the E in C No	Remarks
1	Almirah, large, with shelves	6'—6" × 3'—10" × 1'—8", with four shelves.	F 21 (1925)	
2	Almirah, large, without shelves.	As for index No 1, but shelves are omitted and replaced by hanging hooks and two drawers	F 21 (1925)	
3	Almirah, map	4'—10" × 2'—8" × 3'—3", with drawers	F 22 (1880)	
4	Almirah, medium, with shelves	4'—6" × 3'—0" × 1'—3", with four shelves (Where almirah, small, will suffice with shelves altered, it will be issued in lieu)	F 21 (1925)	
5	Almirah, small, with shelves	3'—0" × 2'—8" × 9" with four shelves	F 19 (1884)	
5a	Almirah, small, with shelves and drawer	(Under consideration.)	F	(Under preparation.)
6	Apparatus, hot water.	A portable boiler 2' chain 3 high 50 gals capacity with furnace	F 51 (1925)	
7	Arm rack—Bigg's pattern.	Size according to number of rifles	F	(Under preparation.)
8	Bar, horizontal	One 1" dia reinforced moveable wooden bar, 7'—3" long, supported 8'—1½" off the ground on posts stayed.	Gym. Apparatus Plate VII (1925)	
9	Bar, leaping, 24'.	Wooden bar or pole, 24' long.	F. 69 (1867)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
10	Bars, parallel .	Two re-inforced wooden bars, each 9′ long, spaced 1′—7½″ from centre to centre, supported on four stands 4′ off the ground.	Gym. Apparatus Plate I (1925).	
11	Bars, wall .	Twenty horizontal bars spaced 5″ centre to centre except upper two bars will be 12″ centres, supported 4⅜″ clear from the wall and 3 sets each 2′—7″ in the clear.	Gym. Apparatus Plate I (1925).	
12	Bath, slipper (portable on wheels).	A galvanized iron bath 6′ long, 1′—10″ wide, 1′—7″ deep on wheels fitted inside with perforated portable canvas stretcher.	H. F. 207 (1903).	
13	Beam, double-double.	Two sets of double beams, 2½″ × 6¾″ length varying from 12′ to 15′ (14′—8″ normal) supported by a centre post between the wall and a removeable end post, beam adjustable in height up to 9 ft.	Gym. Apparatus Plate II (1925).	
14	....	....	....	
15	Beam, single-double.	As for index No. 13, except that only one set is provided and the end post replaces the centre post.	Gym. Apparatus Plate II (1925).	
16	Bedstead, iron, wire mattress.	Lawson Tait pattern to be issued.	..	

List of articles of M E S supply of Barrack and Hospital Furniture—*contd*

Index No	Nomenclature	General d mens ons.	Reference to plan issued by the E in C	Remarks
			No.	
17	Bedstead fold ing Mark II	Standard O D type		
18	Bench 6 × ° — 6	He ght to suit local condit ons des gn as per F 55		
19	Bench armour ers	As requ red. One of the benches shown in plan F 55 to be supplied as su table to local condit ons		
20	Bench art ficers	As required. One of the benches shown m plan F 55 to be supplied as su table to local requirements		
20*a*	Bench black smith.	10 × 3 × ° —8″	F 55 (1868)	
20*b*	Bench book binder "	8 × 3 × 2 —8″ with removeable top.	F 55 (1868)	
21	Bench for car penters	7 ×2 and 3 —6″ high	R A F Plate II (1918)	
2°	Bench for fitters and copper sm ths	9′×3 and 3 high	R A F Plate II (1918)	
23	Bench gym nast c	A solid portable bench with four legs plat form 4 × 1 —9″ 3 —3″ high.	G A Plate XI (19°5)	
°4	Bench for riggers	14 × 4 and 2 —6″ high	R. A. F Plate II (1918)	
25	Bench for sail makers	10 × 3 and 2 —6″ h gh	R A F Plate II (1918)	
25*a*	Bench shoe maker	8 × 2 —6″ × 3	F 55 (1868)	
25*b*	Bench tailor	10 × 4 × 2 —6″	F 55 (1868)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
25*c*	Bench, tinsmith	5′—5″×2′×3′ . .	F. 55 (1868).	
25*d*	Bench, turner	7′×2′×3′—6″ . . .	F. 55 (1868).	
26	Bench for watchmakers.	3′×2′—6″ with drawers.	F. 55 (1868).	
27	Bench, workshop, 14′×4′.	Height to suit local conditions, design as per F. 55.	..	
28	Bench, workshop, 10′×4′.	Height to suit local conditions, design as per F. 55.	..	
29	Bier . .	(*a*) Hand type, 7′—4″ ×2′—6″ frame with handle for carrying.	H. F. 231 (1877).	
		(*b*) Wheeled type, 7′—9″×2′—8″ frame with handle fitted on a two-wheeled hand cart.	H. F. 230 (1907).	
30	Bin, portable, for stores (Type A).	4′ long, 2′ high and 14″ deep inside dimensions with cover. Partitions according to type.	R. A. F. Plate II (1918).	
31	Bin, portable, for stores (Type B).			
32	Bin, soiled linen	Box 6′× 2′—9″ × 2′—10″, with lid and wire gauze fitted on all sides top and bottom.	H. F. 210 (1924).	
		(*a*) *Cabinet Pattern.*		
33	Bin, soiled linen, small.	Cabinet 1′—4″ square, 3′—6″ high—top half fitted with cane sides—top hinged and fitted with a lock—also a locked door fitted in lower half on one side.	F. 83 (1925).	

List of articles of M E S supply of Barrack and Hospital Furniture—*contd*

Index No	Nomenclature	General dimensions	Reference to plan issued by the E in C.	Remarks
		(b) Basket Pattern	No	
		Cane work basket 1′—6″ square 2—6″ high with remove able lid		
34	Bin, wine	5—2½″×4—6″×1—3″ cupboard with doors eight shelves	H F 211 (1924)	
35	Blackboards and easels	6 easel with tea piece 3×3—6″	F 16 (1865 as amended by Cir No 7 C 1913)	For musketry instruction purposes one blackboard only, 4×3′ will be provided with each easel
		Blackboards		
		Large 4×3 approximately		
		Small 3×3 approximately		
36	Board cutting	3×2×6—3″	F 55 (1868)	
37	Board diet scale	Board 1—3″×9″×½″	H F 235 (1925)	
38	Board fencing	Four boarded sections each 12×6×3¼″ high fitted with dowels and hooks so that a platform 48×6 can be made up	G A Plate VI (1925)	
39	Board fire orders	G I 18″×18″ pointed	F 39 (1925)	
40	Board hospital rules	Gal Iron 14″×22″ pointed	F 39 (1925)	
41	Board, inventory	Gal Iron 15½″×9″ pointed	F 39 (1925)	
42	Board notice	G I or wooden boards of size according to requirements		
43	Board order	G I or wooden boards of size according to requirements		

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
44	Board, spring, for vaulting horse.	7′ x 2′ board with coir padded patch 4′ x 2′ supported on two moveable trestles 1′—4½″ high.	Gym. Apparatus Plate V (1925).	
45	Bookcase, library pattern.	In two parts—top part. 3′—8¾″ x 4′—4½″ x 11″. fitted with two glazed doors and four shelves ; lower part, 3′—7″ x 4′—4½″ x 1′—6″, fitted with two wooden panel doors, and two bottom shelves with four drawers.	F. 8 (1925).	
46	Bookcase, sectional (3 sections).	5′ x 2′—9½″, 3 sections each with a glass panel and handle. Upper section, 1′—8½″ x 11¼″. Intermediate section, 1′—5¾″ x 11¼″. Bottom section, 1′—10¼″ x 11¼″.	F. 88 (1925).	
47	Bookshelf for quarters.	2′—6″ wide and 4′—6½″ high, fitted with a folding hinged writing flap and pigeon holes, also a bookshelf at the top and two shelves at the bottom.	F. 92 (1925).	
48	Bookshelf, open, large and small.	6′ x 4′ x 1′ or 4′ x 4′ x 1′, respectively, 4 shelves.	F. 13 (1925).	
49	Bookshelf, revolving.	1′—10″ x 1′—10″ square revolving frame, 3′—3¾″ high in 3 tiers on wooden footing 5″ above ground level.	F. 75 (1924).	
50	Box, dry earth, large.	Size as required . .	..	Old cases to be used as far as possible.

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd*

Index No	Nomenclature	General dimensions	Reference to plan issued by the E.-in-C.	Remarks
			No.	
51	Box, dry stores	A wooden box on legs, 5'—0" × 1'—8¼" × 2'—0" deep with removeable tin canisters and trays and a zinc lined compartment	H. F. 217 (1925)	
52	Box, ice	3'—4¾" × 2'—1¼" × 3'—6¾" high insulated with lid in two halves with front doors and three double removeable iron shelves inside	F. 24 (1925)	
53	Box, ice, railway, large	4' × 1'—6" × 1'—7" high insulated with lid hinged flaps in front and two handles. Fitted inside with two perforated trays	F. 17 (1925)	
54	Box, ice, railway, small	2' × 1'—6" × 1'—6" high insulated, with lid, hinged flap in front and two handles. Fitted inside with one perforated tray	F. 17 (1925)	
55	Box, kit, British Troops	2'—2½" × 2'—½" × 1'—4" (outside dimensions) with handles hinged lid, hasp and staple and 4" × 3" recess for small articles inside	F. 29 (1925)	
56	Box, kit, Indian Troops	24" × 24" × 12" (inside dimensions) with metal handles, one in front and one in rear, hinged lid and hasp and staple	F. 9 (1925)	
57	Box, kit, steel, sea-service	2'—2" × 1'—2" × 1' (external dimensions) with locks and non-interchangeable keys and metal handles	F. 12 (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
58	Box, letter .	Wooden box, 12″×9″, 1′—9″ high at the back, sloping hinged top with a slit fitted with hasp and staple and two pieces of flat iron for supporting the box.	F. 68 (1925).	
59	Box, medical stores.	Under consideration .	H. F.	(Under preparation).
60	Box, partitioned (for tally cards, E. P.).	2′—1″ × 1′—4″ × 10½″ open box with two partitions.	R. A. F. Plate II (1918).	
61	Box, partitioned (for tally cards, I. P.)	2′—1″ × 1′—7½″×10½″ open box with two partitions.	R. A. F. Plate II (1918).	
62	Box, partitioned (for filing A. F. B.-108).	1′—7″ × 1′—5½″×10½″ open box with two partitions.	R. A. F. Plate II (1918).	
63	Box, sand model	Wooden box, 5′—2″ × 3′—8″ outer dimensions and 5½″ high.	F. 74 (1924).	
64	Box, wooden, for tenders.	A wooden box, 1′—3″ square, 2′ high, fitted with a hinged lid, hasp and staple and two handles. Slit in the lid 10½″ long, 1″ wide.	F. 87 (1925).	
65				
66	Bracket, reading, adjustable.	Wooden frame, 12″× 10″ with ledge at bottom, adjustable on a metal arm so shaped as to fit into a chair, etc., as required.	F. 68 (1925).	
67	Cabinet, bread	2′×2′×2′—10″ on legs 9″ long double door in front with hasp and staple, tin lined, 4 battened shelves.	H. F. 245 (1925).	

List of articles of M E S supply of Barrack and Hospital Furniture—*contd*

Index No	Nomenclature	General dimensions	Reference to plan issued by the E. in C.	Remarks.
			No	
68	Cabinet for filing A F B 43	1—10″ × 9—3″×2′—8″, 5 drawers	P A F Plate II (1918)	
69	Cabinet for filing indents	2—9¼″×14¾″×3—11″ 9 drawers	R A F Plate II (1918)	
70	Calender wall	As required		
71	Cart conservancy	*Crowley Bradley* or other suitable pattern		
72	Cart drinking water	Suitable pattern as made by civil firms for carrying drinking water		
73	Cart hand	An open galvanized iron body 4—6″×3—0″, fitted with removeable ends supported by two 3—6″ diameter wheels and a tee handle and pole 3—2″ × 6—9″ attached to the front end	H F 212 (1925)	
74	Cart rubbish	Suitable pattern as made by civil firms		
75	Cart, watering	Suitable pattern as made by civil firms for watering roads etc		
75*a*	Case specimen, glass fronted	(Under consideration)	F	(Under preparation)
75*b*	Case specimen glass topped	(Under consideration)	F	(Under preparation)
76	Chair, barrack	Plain wooden chair 3 high with back and arms ½″ plank seat, 1—9½ wide at front	F 26 (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
77	Chair, cane bottomed.	Plain wooden chair 3′ high with back and arms, ½″ plank seat, 1′—9″ wide at front, fitted with removeable cane seat.	F. 26 (1925).	
78	Chair, carrying	Plain wooden chair with sloping back and arms, cane seat 1′—6½″ × 1′—5″, frame extended to one pair of carrying arms in front and two pairs behind.	H. F. 226 (1925).	
79	Chair, children, cane bottomed.	Similar design to chair, cane bottomed, but of smaller dimensions to suit ages of children to whom issued.	F. 26 (1925).	
80	Chair, close stool, small.	Plain wooden chair, 26″ high with arms and back — seat 16″ × 16″ arranged to take pan commode and fitted with lid which when lifted up rests against the back of the chair.	H. F. 223 (1886).	
81	Chair, cushion arm.	Design as required. Usually suitable pattern made by civil firms will be supplied.	..	
		(A) *Folding type.*		
82	Chair, easy	Wooden folding chair, 3′—2½″ high, with arms, sloping back, cane fitted, sloping cane fitted seat, 1′—7″ wide.	F. 15 (1925).	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd*

Index No.	Nomenclature.	General dimensions	Reference to plan issued by the E.-in-C.	Remarks
			No	
		(B) *Non folding type* Wooden chair, 3'—2½" high, with arms, sloping cane fitted back 2'—8," sloping cane fitted seat 1'—6" long Front width of chair 2'—0½"		
83	Chair, invalid, wheeling.	Wooden chair 3'—10" high, with arms, sloping back, removeable seat supported on three rubber tyred wheels—one small, one at the back and two large ones at each side fitted with hand propelling wheels, detachable and adjustable leg rest also fitted	H. F. 225 (1921).	
84	Chair, long, reclining	Wooden chair, 2—8" high with continuous curved back and seat, cane fitted, horizontal arms with folding extension of 2'—4"	F 72 (1925)	
85	Chair, revolving, office	Cane seat 1'—6"×1'—3", plain wooden arms and open railed back mounted on a metal screw working in metal socket supported by three legs Normal height of seat off ground level 1'—7"	F. 76 (1924)	
86	Chair, Roorkee pattern	A collapsible canvas and wooden chair fitted with a canvas seat 1'—6"×1'—6", a revolving canvas back 1'—6"×1—6", and leather arm straps	F 40 (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
87	Chairs, for schools.	See Index No. 105.	..	
88	Charpoy . .	A wooden frame, inside dimensions 6′—1″×2′—4½″, supported by four legs. —top of frame 1′—5½″ above the ground, frame strung with a loose fibre or munjban.	F. 14 (1925).	The cost of repairs to stringing and restringing is debitable to units concerned.
89	Chest of drawers.	3′—11½″ ×3′ ×1′—6″ deep, 2 half width and 3 full width drawers.	F.57 (1925). Amendment Slip No. 1.	
90	Chest, office .	A wooden chest, 3′—6″ ×1′—6″×4′—6″, with two double hinged doors in front, supported on four legs 6″ high, fitted with four drawers, file holes and two shelves.	R. A. F. Plate III (1925).	
91	Chest, stationery, mobile.	2′—10½″×2′—3″×18″ with partitions, lid and handles.	R. A. F. Plate IV (1920).	
		Type A.		
92	Commode, portable.	An angle frame 1′—5″ ×1′—6″ supported about 1′—4″ off the ground by collapsible angle iron cross legs and fitted with a hinged wooden seat and flyproof cover.	F. 23. (1925). Amendment Slip No. 1.	
		Type B.		
92a	Commode, portable.	A wooden seat 1′—3¾″ ×1′—5¼′ supported 1′—5¼″ off the ground by four angle iron legs and fitted with hinged flyproof cover.	F. 23 (1925) Amendment Slip No. 1.	

List of articles of M E S supply of Barrack and Hospital Furniture—contd

Index No	Nomenclature.	General dimensions	Reference to plan issued by the E.-in-C.	Remarks.
93	Cot, infant	Wooden open frame work collapsible cot 4—6"×2—6" Mattress frame supported about 1'—10" off the ground by four legs—fitted with mosquito framing and one hinged side frame	No F 89 (1925)	
94	Cot iron trestle	Cot mattress (removable) 6—6"×2—9" made of angle and hoop iron supported 1—7" off the ground by two sets of two iron collapsible trestles and transoms	F 30 (1925)	
95	Cot, newar	Bed frame wooden 6—7"×3—0" (outside dimensions) strung with newar 1'—8" above ground with ⅜" rod supported on the bed frame for attaching mosquito net	F 31 (1925)	
96	Couch	Overall dimensions 6—6" in length 2—10" in width 2—5" high padded and upholstered	F 90 (1925)	
97	Couch invalid adjustable	Hinged wooden newar strung frame 6—6" ×2 attached to a wooden frame 7 ×2'—2" supported by 6 legs fitted with casters The back and front portions are adjustable and adjustable arms supports are provided	H F 236 (1921)	
98	Cradle, fracture	2 wide 1—7" high, 1—10" deep top ridge supported by 3 iron rods	H F 237 (1920)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
99	Cupboard, fly-proof.	5′—6″×1′—9″×17¾″ deep, supported on four legs so that top is 3′—3″ above floor level, divided into 4 compartments each with separate doors, front and sides fitted with wire gauze.	No. H. F. 228 (1925).	
100	Cupboard, food	3′—5½″×3′—8″×1′—3″ three batten shelves, double doors, front and sides wire gauze pannelled.	F. 69 (1925).	
101	Cupboard, mess utensils.	3′—0″×3′—6″×1′—6″ double doors one shelf and fitted above this cupboard a battery of three shelves 2′—8″×3′—6″×1′—0″.	F. 25. (1925).	
102	Desk, long .	9′ long, 1′—10″ wide partly sloping height to vary according to use.	F. 33 (1925).	
103	Desk with cupboard and flap.	Body of the cupboard, 3′—0″×2′—6″, fitted on top with tray covered by hinged sloping cover provided with a lock. Cupboard fitted with shelves and double doors with a lock. Overall height 4′—4½″. At each end a hinged flap, 2′—6″×9″ supported on a removeable bracket is provided.	F. 84 (1925).	
104	Desk with dais	36″ long, 34″ wide partly sloping, height at back 36″ on a 5½″ high platform 78″×44″.	F. 33 (1925).	

List of articles of M E S supply of Barrack and Hospital Furniture—contd

Index No	Nomenclature	General dimensions	Reference to plan issued by the E. in C.	Remarks
			No.	
105	Desk and chair for schools	*Type A*—Table top 21"×21" Height 30" Chair seat 14" ×14" Height of seat 18" *Type B*—Table top 21"×21" Height 27" Chair seat 14"×14" Height of seat 16" *Type C*—Table top 18"×18" Height 24" Chair seat 12"×12" Height of seat 14" *Type D*—Table top 18"×18" Height 21" Chair seat 12"×12" Height of seat 12"	F 20 (1924)	
106	Dinner wagon .	Top shelf, 3—8"×1'—3", 4 above ground level. Lower shelf, 3—6"× 1'—1," 1'—9" above ground level. One full length and two half length drawers below top shelf and a lock up cupboard below lower shelf	F 78 (1925) Amendment Slip No 1	
107	Discus . .	A brass circular casting not less than 8⅝" dia fitted with two hard wood blocks and brass plates the whole to weigh not less than 4 lbs. 6 4 ozs.	G A Plate VI (1925)	
108	Dresser, with shelves	6'—0"×2—6"×1—10" deep, containing two drawers and two cupboards with double doors A battery of three shelves fixed above the dresser, 5—11" ×2—6"×11"	H F 232 (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
109	Footboard .	2′×2′ with wooden slats.	..	Only supplied if not a fixture.
110	Form, dining, tent.	6′×8½″×1′—9½″ high with two folding legs.	H. F. 208 (1922).	
111	Form, with back	Width 12″, height 18″ and length 6′ unless otherwise stated, with sloping battened back 3′ above ground.	F. 7 (1925).	
112	Form, without back.	12″ wide, 18″ high, length 5′ unless otherwise stated.	F. 7 (1925).	
113				
114	Frame, diet sheet.	14½″×9⅝″ wooden board with hanging loop and two moveable metal bars for retaining diet sheet.	H. F. 235 (1925).	
115	Frame, map .	Wooden battened frame, 13′—7½″ ×7′—11″ hinged in two folds, with two hanging clips.	F. 74 (1924).	
116	Frame, mosquito net.	As required to suit local conditions. Where suitable, wires for attaching mosquito nets will be provided as works; otherwise wooden or iron frames as considered most economic locally will be provided.	..	
116*a*	Frames, mosquito net. (Field Hospitals.)	Four horizontal iron bars, two 5′—11″ and two 3′—1½″, supported by four vertical iron bars, each 4′ high.	H. F. 224 (1925).	

List of articles of M. E S supply of Barrack and Hospital Furniture—contd

Index No	Nomenclature	General dimensions	Reference to plan issued by the E in C	Remarks.
117	Frame, temperature chart	14½"×9¾" wooden board with hanging loop and two moveable metal bars for retaining temperature chart	No H F 235 (1925)	
117a	Gallows with four climbing ropes, set	A wooden removeable frame work consisting of one horizontal beam 9"×6", 21' long supported by three uprights, 6"×6"× 24' long, above the ground, four ropes each 22—7½" long supported by 4 hooks from the horizontal beam, ends of the ropes fitted with a leather shoe	G A Plate VIII (1925)	
118	Headrest	2'—6" × 2' wooden frame, cane fitted with newar back hinged to a bottom frame and adjustable	H F 239 (1925)	
119	Hot case, large	3'—4" ×3'—8" × 1'—6¾," double doors lined wih sheet iron, two shelves	F 44 (1925)	
120	Hot case, small	3'—4" × 2'—8" × 1' —7", double doors lined with tin, two shelves.	F 44 (1925)	
120a	Incinerator, field	(Under consideration).	..	
121	Incinerator, iron cylinder	A sh et iron cylinder 1'—3" d a, 1'—6" high, fitted with a stand and doomed top — t e whole to be collapsible	H F. 216 (1925).	
122	Jumping stand ards	Two wooden stand ards 6 high on 2 cross footings with pin holes giving adjustment for every inch between 2' and 5'—9"	G A. Plate VII (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
123	Ladder, bamboo	Bamboo uprights and treads about 1′—8″ centre to centre. Length to suit buildings for which supplied.	F. 46. (1925).	
124	Ladder, fire .	Length to suit buildings, for which supplied.	F. 97 (1925).	
125	Ladder, step, 3′	Top platform 19″×10″, width of step at top 12″, three intermediate steps, hinged back, strut spread at bottom 2′—9″.	F. 11 (192[illegible]).	
126	Ladder, step, lattice, 8′.	Top platform 16″×10″, width of step at top 12″, 9 intermediate steps, removeable back, strut spread at bottom 5′—2″.	R. A. F. Plate VI (1920).	
127	Ladder, step lattice, 16.′	Top platform 16″×10″, width of step at top 12″, 20 intermediate steps, removeable back, strut spread at bottom 6′—6″.	R. A. F. Plate V (1920).	
128	Mallet, dry earth	Head 4″ dia, 6″ long, overall length, with handle, 12.″	F. 4. (1885).	
129	Manger, iron moveable.	3′—6″×1′—6″ metal frame to take two buckets, 3′ above ground.	F. 53 (1914).	
130	Pigeon holes .	Wooden horizontal rack, 1′—7″×1′—1$\frac{7}{8}$″ at the bottom, 10″ high with 14 holes of varying depths.	F. 85 (1925).	

List of articles of M. E. S supply of Barrack and Hospital Furniture—*contd.*

Index No	Nomenclature.	General dimensions	Reference to plan issued by the E in C.	Remarks
			No.	
131	Planks, wood, set of 6.	Planks 3—3' × 1' × 1¼" to be placed crosswise on the frame of iron bed st ad A piece of flat iron 2" wide, to be affixed to each end of the planks, the overlap of which will prevent them *from slipping off the* bedstead	.	To be used when required for frac ure cases
132	Platform, lec turing	A wood n platform 7'—6"×8 , normally 1' high	F 50 (1925)	
133	Pointer, long .	Taper d wooden rod, 1" butt end, 5' long	F 16 (1865 as amended by Cir 7 C of 1913)	
134	Pointer, short .	Tapered wooden rod, *¾" butt end, 3' long*	F. 16 *(1865 as* amended by Cir 7 C of 1913)	
135	*Posts for leap ing bar*	*Two posts 5' high on* 3' cross footings strutted—posts dril *led with holes to* take pegs for sup *porting leaping bar*	*F 59* (1867)	
136	P [illegible]	[illegible] conditions Rop as required.	..	Aloe fibre slinges made by the Allipuram *Jail Bellary,* should be used in pref rence to other types
137	Rack, aera'ed water	4 —10½" × 4'- 4½"×1' —5½"—3 racks each consisting of two sets of planks cut *out to hold 48* bottles v rtically	F 61 (1924)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C. No.	Remarks.
138	Rack, apron .	A wooden frame, 4' wide, 5' high, with 6 pegs.	H. F. 213 (1925).	
139	Rack, laundry .	8' long, 2' wide, 5'-7" high, in three perforated tiers.	F. 91 (1925).	
140	Rack, letter .	Wooden frame, 3'-7" × 5'-9½" with 40 letter holes, each fitted with a drop hole plate and [illegible] attached. Size will be reduced or increased according to the authorised number of letter holes.	F. 80 (1924)	
141	Rack, map . .	Frame 4'×4' with 5 sets of 3 brass hooks of 4" opening.	F. 38 (1884)	
142	Rack, stationery	Wooden vertical rack, 1'-6¼" broad, 16" high and 8½" deep, with eight pigeon holes of varying depth and a space for pens, etc.	F. 85 (1925)	
143	Rack, sword .	Frame 3'×3'-3" with 6 sets of 3 brass hooks of 4½" opening.	F. 52 (1925).	
144	Rack, towel .	3'-10" wide, 3'-6" high on two plain footings, 1'-3" long.	F. 52 (1925)	
145	Rack, with drawers.	5'-6" × 6'-0" × 4'-0", 3 battened shelves and 2 drawers.	F. 35 (1925).	
146	Rack, without drawers.	5'-6" × 6'-0" × 4'-0", 4 shelves.	F. 35 (1925).	

List of articles of M. E. S supply of Barrack and Hospital Furniture—*contd.*

Index No	Nomenclature	General dimensions	Reference to plan issued by the E. in C.	Remarks.
			No	
147	Receptacle, large dry refuse.	A circular sheet iron bin 18" dia. 16" deep, with handles and removeable lid (hill and plain stations)	F. 47 (1920)	When for dry refuse as described. When for wet refuse to have hole in lid with sliding cover to take outlet pipe. When for filth to be coal tarred.
148	Receptacle, large, wet refuse			
149	Receptacle, large, filth.			
150	Receptacle, small, dry refuse	As above but only 9" dia for plain stations only For hill stations, dia 9", depth 14", with handles inner lid which is clamped on	F 47 (1920) F 48 (1908)	When for dry refuse as described When for wet refuse to have hole in lid with sliding cover to take outlet pipe When for filth to be coal tarred
151	Receptacle, small, wet refuse			
152	Receptacle, small, filth (hill or plain stations)			
153				
154	Safe, meat and milk	2'—9"×2'—3"×2—3" wire gauze fitted all sides, single side door, one removeable shelf, fitted with 4 small pegs and 4 rings for suspending	F 60 (1923)	
155	Safe, meat and milk, portable	2'—6½"×22"×22" wire gauze fitted all sides, single side door, one removeable shelf, 4 legs—the whole to be collapsible and to fit in a packing case with handles	H F. 242 (1917)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
156	Scoop, dry earth.	6"—2½" iron trowel with 5" handle.	F. 4 (1885).	
157	Scraper, dry earth	Flattened iron scraper, rounded end 1' 6" long	F. 4 (1885).	
158	Screen for arch ways	6'–0" × 6'–6" canvas screen on two wooden stands 2' wide with hinged canvas panels 2'–0" × 6'–6" on either side, on castors. Screens will be either 10, 12 or 14 feet to suit openings for which they are intended. When screens 12 and 14 feet long are required the width of each of the two panels should be increased to 3' and 4' respectively. 14' screens will have a centre rail.	H. P. 201 (1925).	
159	Screen, lantern	White sheet of size required.	..	
160	Screen, light, moveable.	3 hinged panels 5'—6" × 2' fitted with washable covering.	F. 71 (1925).	
161	Settees, for billiard rooms.	A cane seat 1'—6" deep, supported 2'—6" off the ground, fitted with arms and a cane back, top of which is 4' above ground. A step 1' wide and 1' high provided in front, also a small rack at the top of the back. Length to suit the size of the room.	F. 93 (1925)	

List of articles of M. E S supply of Barrack and Hospital Furniture—*contd*

Index No.	Nomenclature	General dimensions	Reference to plan issued by the E. in C	Remarks
			No	
162	Shelves for clothing and bed linen	8′—3″×3′—4″×4′—6″ cupboard, 6′ above ground, with two sets of double doors,—one shelf and bottom open battens as required to suit the building	H F 234 (1925)	
163	Shelf, gymnastic	6′ × 5′ supported by iron brackets attached to the wall, 7′ above floor level	Gym Apparatus Plate V (1923)	
164	Sieve, dry earth	14″ dia, 3″ deep	F 4 (1885)	
165				
166	Stand, ghurrah filter	Three metal rings 9″ dia, supported by three metal legs—top ring 2′—10″ above ground	F 2 (1925)	
167	Stand for ghurrahs	Two shelves 5′—6″× 10″ supported by 6 posts 5″ and 1′—10″ above ground, respectively	F 64 (1925)	
168	Stand, hall	Open wooden stand, 2′—6″ wide, 6′ high, fitted with two cross arms with coat hooks attached and a small looking glass, also one drawer and place for sticks, 1′—5″ in depth	F 77 (1925) Amendment Slip No I	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
169	Stand jardiniere (teapoy).	14″ × 14″ platform supported by 4 sloping legs 4′—3″ above ground.	F. 63 (1919).	
170	Stand, map .	Wooden post with hook for attaching maps and two cross arms, adjustable in height, maximum height 6′—2″ on four-footed base 2′—6″.	F. 36	
171	Stand, saddle .	A rounded wooden top 4′—0″ × 9″, supported by two stands, the whole 3′—9″ high and fitted with 4 pegs.	F. 11 (1925).	
172	Stand, for surahis.	Platform 6′—3″ × 9″ supported on six legs 1′—6″ above ground.	F. 64 (1925).	
		(*a*) *Wooden.*		
173	Stand, tank, drinking water.	Open stand, 2′—6″ × 2′—0″, 1′—3″ high.	F. 81 (1924).	To be metal or wooden according to whichever is cheaper locally.
		(*b*) *Metal.*		
		Circular stand, 2′—3″ diameter, 1′—3″ high.		
174				
175	Stand, wash-hand.	Platform 2′—10″ × 1′—7″ supported by 4 legs 2′—5″ above ground.	F. 56 (1924).	

List of articles of M E S supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature	General dimensions.	Reference to plan issued by the E in C.	Remarks
			No	
176	Steps with plat form.	Platform 1′—11″ × 2′—5″ × 3′—9″, reached by two steps 1′—3″ × 2′—5″ × 1′—7½″ and 1′—3″ × 2′—5″ × 2′—7″ Over all length including steps 4′—5″.	R A F Plate III (1918)	
177	Stool, camp .	15″ × 1″, canvas seat, folding over legs, height 17½″	H F 214 (1901)	
178	*Stool, gynæcological*	*12″ × 12″ × 8″ high*	*H F 219 (1914)*	
179	Stool, 2′ high .	1′—6″ × 1′ seat, 2′ high	F 2 (1925)	
180	Stool, spittoon .	10″ dia., circular top supported on 3 sloping legs 1′—6″ high	H F 215 (1919)	
181	Table, 3′ × 1′—8″	A wooden table, top 3′ × 1′—8″, 2′—5⅝″ high, no drawers	F 76 (1924)	
182	Table, 3′ × 3′ .	3′ × 3′ × 2′—6″ .	F 86 (1924)	
183	Table, 3′ × 3′, with marble top	A wooden four legged table, 2′—6¼″ high, covered with a marble or other suitable stone top, 3′ × 3′.	H F 209 (1925)	
184	Table, 5′ × 2′—10″	5′ × 2′—10″ × 2′—6″, plain with drawer at each end.	F 1 (1925)	
185	Table, 6′ × 3′—6″	6′ × 3′—6″ × 2′—7″, plain with four legs	F 37 (1925)	
186	Table, 9′ × 4′ .	A plain four legged wooden table, 9 × 4′, 2′—6″ high	F 95 (1925)	
187	Table, 12′ × 3′	A plain four legged wooden table, 12 × 3′, 2′—6″ high	F 94 (1925)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
188	Table, bedside .	22″×18″×3′—1¾″ with 2 shelves and towel rail.	No. F. 66 (1919).	
189	Table, bedside, officers' wards.	22″×16″×2′—1¾″, marble top with two shelves.	H. F. 221 (1919).	
189*a*	Table, black-smith.	7′×2′—9″×3′—3″. .	F. 55 (1868).	
189*b*	Table, brush-maker.	6′×3′×2′—8″. .	F. 55 (1868).	
190	Table, camp .	2′—9″×2′—0″×2′—3″ top in two halves hinged, supporting frame also hinged, so that the whole folds up.	F. 41 (1885).	
191	Table, card .	Wooden four-legged table, 2′—6⅛″ high, top 2′—6¾″ square, with curved corners and sides cut away, fitted with a circular green baize cover 1′—11½″ diameter.	F. 79 (1924).	
191*a*	Table, collar-maker.	As required. One of the tables shown on plan F. 55 to be supplied as suitable to local conditions.	..	
192	Table, common, 7′×3′.	7′×3′×2′—6″.	F. 37 (1925).	
193	Table, common, 7′×3′, zinc-covered.	7′×3′×2′—6″, with zinc-covered top.	F. 37 (1925).	For mortuary.
193*a*	Table, composing frames.	Sloping top, 2′—6″×2′—1″, 2′—9″ high at front and 3′—4″ at back.	F. 55 (1868).	
194	Table, cook-house, large.	3′×2′×2′—6″ . .	F. 3 (1925).	
195	Table, cook-house, small.	2′—6″×1′—6″×2′—6″	F. 3 (1925).	

List of articles of M. E S supply of Barrack and Hospital Furniture—*contd*

Index No.	Nomenclature	General dimensions	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
196	Table, dining .	A wooden four legged table 2—7″ high, fitted with a remove able three leaf top, allowing the size to be 5—0″×4—0″ or 7—0″×4—0″	F 99 (1925)	
197	Table, dispensing	7 ×3—9″×3′—2″, 6 drawers three each side and two rows of vertical pigeon holes in centre of table	H F 218 (1885)	
198	Table, dissecting	7—6″×3 ×2—8″ top zinc covered and graded to a central hole head rest and bucket stand	H F 219 (1886)	
199	Table, dressing	3—6″×1—6″ top 2—6″ high, fitted with two drawers below the top and two sets of small double drawers at the back corners	F 73 (1924)	
200	Table dressings 4 ×3, zinc-covered	A wooden four legged table 4 ×3, 2′—6″ high fitted with two drawers and top covered with sheet zinc	H F 202 (1925)	
201	Table gynæcological	3—2¼″×1—9″×2—9¼″ folding hinged flaps each end 1—6¼″×12″	H F 248 (1914)	
202	Table hall	Top 3 ×1—10″, height 2—6″, one drawer in centre	F 86 (1924)	
203	Table, imposing with slab for printers	6 ×2 ×3 with two drawers and small slab for top	F 55 (1868)	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E-in-C.	Remarks.
204	able, invalid .	Tray 3′—2″ × 15½″ with end supports 14½″ high, provided with two wooden rollers on inside of each support.	No. H. F. 220 (1900).	
205	Table, iron trestle, 5′× 2′—6″.	Battened wooden removeable top 5′× 2′—6″, end covered with hoop iron and battens underneath to take trestle transoms. Two metal trestles 2′—5″ high—transom 2′—6″ wide.	F. 6 (1925).	When required for use in dining halls a ½″ space should be allowed between the planks to prevent accumulation of dirt.
206	Table, iron trestle, set with 2 G. I. planks.	Two metal trestles 2′—5″ high, transom 2′—6″ wide and two G. I. planks.	F. 6 (1925).	For mortuary, Field Service.
207	Table, iron trestle, 5′× 2′—6,″ with zinc top.	As for Table, I. T., 5′×2′—6″, but zinc top fitted.	F. 6 (1925).	
208	Table, laundry.	5′×3′×2′—6″ . .	F. 91 (1925).	
209	Table, office, for clerks.	5′—3″×2′—9″×2′—6″, plain top, eight legs, two drawers each side.	F. 34 (1925).	
210	Table, office, for officers.	5′—3″×4′—2″×2′—6″, cloth top, eight legs, eight drawers, two each side, back and front.	F. 34 (1925).	
211	Table, office, with drawers and cupboards.	4′—4½″×2′—9″× 2′—8½″, cloth-covered, 4 legs, 3 drawers, below top. Portable rack 4′—4½″ × 11½″ × 14″ containing 2 lock up cupboards and pigeon holes to fit in edge of tables.	F. 1 (1925).	
211*a*	Table, painter .	8′×3′×2′—6″ . .	F. 55 (1868).	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—contd.

Index No.	Nomenclature	General dimensions	Reference to plan issued by the E in C	Remarks
			No	
212	Table, portable, field service	5′—10½″×2′—6″×2′—3½″ legs hinged to top and can be folded underneath table	H. F 205 (1922)	
212a	Table, printer	6′×3′×3′ . .	F 55 (1868)	
213	Table, reading .	7′×3′—6″ green baize covered top, 2′—6″ high, four legs, no drawers	F 82 (1925)	
213a	Table, tailor .	6′×4′×2′—6″ . .	F 55 (1868)	
214	Table, war game.	A plain wooden table, 12′ × 36′ made up of 12 tables each 12′ × 3′ × 2′—6″ high, each fitted with four legs and mortised and tenoned to allow tables to fit together.	F 94 (1925) .	
215	Table, workshop.	7′×2′—9″×3′—8″ .	F 55 (1868).	As for Blacksmith table.]
216	T ble, writing, small.	3′-6″×2′×2′—6″, green baize, 4 legs, three drawers in front	F 67 (1925).	
217	Tank, drinking water	G I drum, 2′—2″ dia., 3′ high, with lid.	F. 28 (1925)	
218	Teapoy . .	2′×1′—6″×2′ . .	F. 64 (1904).	
219	Tray for tables, 2 spaces	A horizontal tray, 1′—2″ deep, 10″ high, each space about 9″ wide (width clear)	F 87 (1925).	
220	Tray for tables, 3 spaces.			
221	Tray for tables, 7 spaces.			

List of articles of M. E. S. supply of Barrack and Hospital Furniture—*contd.*

Index No.	Nomenclature.	General dimensions.	Reference to plan issued by the E.-in-C.	Remarks.
			No.	
222	Trestle, bedding.	6′—0″×3′—7″ battened top supported by two metal frames 1′ above ground.	H. F. 203 (1925).	
223	Trestle, coffin .	2′—6″×6″ top rail, 2′—4″ above ground, span of legs at bottom 1′—10.″	H. F. 203 (1925).	Set of 3 trestles.
224	Trestle, for riggers.	3′ × 2¾″ top rail, 3′ above ground, span of legs at bottom 18″.	R. A. F. Plate I (1918).	
225	Trestle, for sailmakers.	3′—6′ × 3″ top rail, 2′—6″ above ground span of legs at bottom 18″.	R. A. F. Plate I (1918).	
226	Trestle, for sailmakers and carpenters.	3′×2¾″ top rail, 2′—6″ above ground, span of legs at bottom 18″.	R. A. F. Plate I (1918).	
227	Trestle, storeroom.	Metal top 8′×2′, supported by two metal frames, 12″ above ground.	F. 5 (1925).	
228	Trestle, tail .	2′—6″×3″ top rail, 3′—10″ above ground, span of legs at bottom 18″.	R. A. F. Plate I (1918).	
229	Trestle, undercarriage.	12″×2⅝″ top rail, 14″ above ground, span of legs at bottom 8″.	R. A. F. Plate I (1918).	
230	Trestle, wing tip.	2′—8″×3¼″ sloping top rail, 4′—6″ and 4′—3″ above ground, span of legs at bottom 18″.	R. A. F. Plate I (1918).	
231	Tripod, urinal .	Triangular top 7½″ sides, three sloping legs pointed—12″ above ground.	F. 5 (19_5).	

List of articles of M. E. S. supply of Barrack and Hospital Furniture—concld.

Index No	Nomenclature	General dimensions	Reference to plan issued by the E in C.	Remarks
			No	
232				
233	Vaulting horse .	Canvas padded top, 5′—0″×1′—6″, 4′ high, frame boarded on all sides, bottom area 5—0″ ×3′—6″, frame in three sections top 1′—6″, intermediate 2′—0″, bottom 6″ deep	Gym. Apparatus Plate III (1925)	
234	Vaulting horse, display	Canvas or leather padded top, 5′×1—7½″, supported by four wooden sloping legs, not framed in, the whole 6′—6″ high and floor space 10′× 5′—9″.	G A Plate IV (1925)	

APPENDIX I.

(Referred to in para. 101 (d)).

List of other articles which the M. E. S. supply, as expendible stores or as fixtures as distinct from those articles provided as fixtures according to the scales in Barrack Synopsis.

Index No.	Name of article.	Orders regarding type to be supplied.
251	Adapters	Of size to suit hose supplied.
252	Adapters, nipples	
253	Barrels, G. I. 50 gall	....
254	Benches	As required to suit the building.
255	Blocks, anvil	Of size to suit anvil supplied.
256	Boards, name	As required to suit the building.
256*a*	Board, record	As required to suit the building.
257	Boxes, sentry	As required locally.
258	Brackets and poles	As required to suit the building.
259	Bricks kiln, dried	....
260	Brushwood	....
261	Chain, securing	As required for Arm Racks and Treasure Chests.
262	Disinfector, Thresh	....
263	Frames, bellow	As required to suit bellows supplied.
264	Grass for thatching	....
265	Jhamps with two poles each . . .	As required to suit the building.
266	Nails, iron, spike, No. 183, 6″ long .	....
267	Pegs, set of 6	As required to suit the building.
268	Pegs, set of 3	
269	Pipes, stand, portable	As required locally.

List of M E S supply of other articles—*contd*

Index No	Name of article	Orders regarding type to be supplied
270	Planks for cot iron	
271	Poles curtain	As required to suit the building
272	Plant Railway old—	Type of track as available
	Chairs with two trenails and two spikes to each	
	Fishplates	
	Rails	
	Sleepers	
273	Racks draining near sink	As required to suit the building
274	Racks for tools	
275	Racks harness	
276	Racks plate to hold 12 plates	
277	Seats for latrines without fixed seats	As required to suit the latrine
278	Shelves	As required to suit the number
279	Shelves for tools	
280	Shelves for urine glasses	
281	Stands bicycle	As required locally
282	Stands iron for washhand basins	As required to suit the building
283	Stands washhand 20 × 2 6″ for 10 basins	
284	Stocks prison	As required
285	Stove cooking	Of type required
286	Stoves burning dejecta	
287	Tables wooden for hand basins	As required to suit the building
288	Tanks G I fire	As required locally
289	Tanks water	
290	Telegraph Line—	As available
	Wire iron soft No 11 W G	
	No 22 W G	
	Insulators porcelain white shackles (with bolts and nuts)	

List of M. E. S. supply of other articles—*concld.*

Index No.	Name of article.	Orders regarding type to be supplied.
290	Telegraph Line—*contd.*	
	Insulators, porcelain, shackles (with bolts and nuts).	As available.
	Telegraph poles	
291	Thermantidotes	As required locally.
292	Timber, bridging—	
	Braces, 14′ × 9″ × 1½″ or 2″ . . .	As available.
	Diagonals, 16′ × 3″ or 4″ dia. . .	
	Diagonal braces, 20′ × 3″ dia. throughout.	
	Ledgers, 14′ × 6″ × 1½″ or 2″ . .	
	,, 16′ × 4″ dia. . . .	
	,, 16′ × 5″ throughout . .	
	Pickets, 5 ft. for bollards . . .	
	Plank (chesses) 10′ × 12″ × 1½″ . .	
	,, for roadway 10′ × 1′ × 2″ . .	
	Road beams, stout for bearers, 20′ × 6″ dia. throughout.	
	Road beams, slight for ribands, 20′ × 3″ dia. throughout.	
	Road beams, 15′ to 20′ × 6″ dia. . .	
	Shore transoms, 12′ × 5″ dia. . .	
	Spars for ribands, 12′ × 3″ dia. . .	
	Spars for hand, rails, 15′ × 3″ dia. .	
	Standards, 12′ × 8″ × 4″ . . .	
	,, 15′ × 6″ dia. . . .	
	,, 25′ × 6″ dia. at top . .	
	,, 22′ × 6″ dia. throughout .	
	Transoms, 12′ × 9″ × 2½″ to 3″ . .	
	,, 14′ × 8″ dia. . . .	
	,, (fork) 16″ × 10″ dia. throughout.	
	,, 16′ × 6″ dia. throughout .	
293	Wood teak planks	As required locally

APPENDIX J.

(Referred to in para 101 (f))

Scales of Reserve Furniture

To be maintained by the M E S

Article	Percentage of furniture to be maintained	
	Barrack	Hospital
Box, kit, British or Indian Troops	10	
Cart conservancy and rubbish	25	25
Chair, barrack	10	
Chair, cane bottomed	5	
Commode, portable	5	
Cot, iron trestle	10	
Form, without back	10	
Punkha fringes, with ropes and canes	10	5
Punkha pulling ropes, etc	20	10
Receptacle, large, filth	10	10
" small "	10	10
" large wet or dry refuse	10	10
" small " " "	10	10
Table, iron trestle 5 ×2 6"	5	
able 5 ×2 10"	5	
able, cookhouse large or small	5	

List of India Army Forms (W) used in the Military Engineer Services—*contd*

Serial No.	I. A. F. No.	Description of form
17	W 1785	Annual return of electrical installation — M. E. S. Power Station / Bulk Gov. Supply / Distribution Gov. Supply
18	W 1785 A	Annual confidential report on clerks M. E. Services
19	W 1785 B	Annual confidential report on draughtsmen M. E. Service
20	W 1786	Annual confidential reports on departmental commissioned officers and civilian Assistant Engineers of the M. E. Services (including the Barrack Department)
21	W 1787	Register of requisition
22	W 1788	Estimate for maintenance and working expenses of electrical installation at for the year 19 19
23	W 1789	General abstract of measurement for periodical repairs to be carried out during the year 19 to the at
24	W 1789 A	Note précis form (Inner sheets)
25	W 1790	Estimate for temporary establishment
26	W 1791	Contract for sales by public auction
27	W 1792	P. A. Estimate of the approximate cost of (Outer sheets)
	W 1792	P. A. Estimate of the approximate cost of (Inner sheets)
28	W 1793	Estimate for works or repairs (complete sheets)
29	W 1794	Estimate for report and specification (Outside sheet)
30	W 1795	Detail of measurements
31	W 1796	Abstract of estimate No of 19 19 of the probable expense of (Half sheet)
32	W 1797	Abstract of estimate No of 19 19 of the probable expense of (Full sheet
33	W 1798	General specification
34	W 1799	Revised estimate No of 19 -19 framed by [illegible] giving comparative stat[illegible] anticipated excess [illegible] No of 19 -19

List of India Army Forms (W) used in the Military Engineer Services—contd

Serial No	I A F No	Description of form
52	W 1815 A	Tender and conditions for conveyance of materia
53	W 1816	
54	W 1817	
55	W 1818	
56	W 1819	Statement showing particulars required to accompa proposals for demolition of buildings
57	W 1820	Comparative statement of an approximate an detailed estimated cost
58	W 1821	
59	W 1822	Application to erect a monument in a Government cemetery
60	W 1823	Sanction to erect a monument in a Government cemetery
61	W 1824	Annual return) Ice plant at
62	W 1825	
63	W 1826	
64	W 1827	
65	W 1828	Treasury remittance note, grave endowments
66	W 1829	
67	W 1830	
68	W 1831	
69	W 1832	Application for re appropriation of budget grant.
70	W 1833	Requisition on the M E S for $\frac{\text{works}}{\text{repairs}}$ for the month of 19
71	W 1833 A	Indenture for secured advances
72	W 1834	Estimate for compensation in lieu of or for deficient quarters and for hiring quarters in the M E S
73	W 1834 A	.
74	.	
75		
76	. .	
77	W 2155	....
78	W 2156	Memo intimating sanction to an estimate

List of India Army Forms (W) used in the Milit
contd

Serial No.	I. A. F. No.	Descripti
79	W-2157 . .	Order form for purchase
80	W-2158 . .	Memo. forwarding Chequ / R. T
81	W-2159 . .	.
82	W-2160 . .	General Provident Fund
83	W-2161 . .	G. Es intimating allotm
84	W-2162 . .	Notice for calling tende
85	W-2163 . .	District Allotments / Withdrawals of
86	W-2163-A .	.
87	W-2164 . .	Corrections in measurem
88	W-2165 . .	Tender for works.
89	W-2166 . .	Statement of stock issu in support of bills.
90	W-2167 . .	No demand certificate.
91	W-2168 . .	Budget item No. District
92	W-2169 . .	Bill book.
93	W-2170 . .	...
94	W-2171 . .	...
95	W-2172 . .	Statement showing appro
96	W-2173 . .	Daily log sheet, steam, 3 w.
97	W-2174 . .	Daily log sheet, ele Oil engine (all types). / 3 wire.
98	W-2175 . .	Daily log sheet Oil engine (all ty 2 wire.
99	W-2176 . .	Daily log sheet All types. / 3 wire.
100	W-2177 . .	Log sheet, p
101	W-2178 . .	Daily log

List of India Army Forms (W) used in the Military Engineer Services—contd

Serial No	I. A F No	Description of form
103	W 2180	Statement of non entitled connections of piped w supply at showing quantity of water sumed and value thereof for the period from to
104	W 2181	Schedule for free allowance of electricity
105	W 2182	Meter card (electrical)
106	W 2183	Meter Reader s Book
107	W 2184	Consumers ledger and wiring schedule
108	W 2185	Final notice cutting off electrical supplies in defa of payment
109	W 2186	Inventory of electrical fittings and fixtures
110	W 2187	Notification of defects in electric supply
111	W 2188	Acknowledgment of complaints regarding electi supply
112	W 2189	Copy of para 5 of rules for M E S Electrica Installations
113	W 2190	Memo forwarding agreement (electrical)
114	W 2191	Rules and general conditions for electric supply to private bungalows, etc
115	W 2192	Schedule of proposed internal wiring
116	W 2193	Furniture / Tools and Plant / Stores stock ledger
117	W 2194	Monthly Stock / Furniture / Tools and Plant return
118	W 2195	Wiring schedule for supply of electric energy to private buildings
119	W 2196	Application for sanction to the purchase in India of English stores
120	W 2197	
121	W 2198	List showing freight paid by credit notes
122	W 2199	
123	W 2200	
124	W 2201	Certificate to be attached to bill in which for demolition appear
125	W 2202	Octroi pass

List of India Army Forms (W) used in the Military Engineer Services—*contd.*

Serial No.	I. A. F. No.	Description of form.
126	W-2203 . .	List of articles of barrack and hospital furniture made up or purchased at , inspected and passed by an officer during the month of 192 .
127	W-2204	Register of indents (Receipts).
128	W-2205 . .	Register of indents (Issues).
129	W-2206 . .	Advice of sending railway receipts.
130	W-2207 . .	....
131	W-2208 . .	Plant record book.
132	W-2209 . .	Daily log sheet, electric power station, $\frac{\text{steam or oil engine}}{\text{2 wire}}$, small sets.
133	W-2210 . .	Weekly test report on battery installed at power stations.
134	W-2211 . .	Form of tender for electric wiring of barracks and other military buildings, for electric works, with general conditions of contract and general specification No. 29.
135	W-2212 . .	Schedule 'B' of internal wiring.
136	W-2213 . .	Fan repair card.
137	W-2214 . .	Estimate for maintenance and working expenses of Ice factory at for the year 19 - 19 .
138	W-2215 .. .	Record of tests of lightning conductors.
139	W-2216 .. .	Regulations for hire of fans to military officers and subordinates residing in private buildings.
140	W-2217 . .	Bill for electrical charges.
141	W-2218 . .	Return of recoveries (electrical).
142	W-2219 . .	Furniture Return—Annual.
143	W-2220 . .	District $\frac{\text{furniture}}{\text{tools and plant}}$ ledger.
144	W-2221 . .	Stock-taking report.
145	W-2222 . .	Estimate for $\frac{\text{New supply}}{\text{Renewals}}$ of furniture.
146	W-2223 . .	Stores in hand ledger.
147	W-2224 . .	Register of capital cost of internal wiring and fittings.

List of India Army Forms (W) used in the Military Engineer Services—*contd.*

Serial No.	I A F. No	Description of form.
148	W 2225	Materials at site Register
149	W 2226	Summary of materials at site.
150	W 2227	Estimate of work (workshops)
151	W 2228	Work order (workshops)
152	W 2229	Register of work orders (workshops)
153	W 2230	Job sheet for work order (workshops).
153A	W 2231	Continuation job sheet for work order (workshops).
154	W 2232	Monthly pay roll (workshops)
155	W-2233	Summary of work done (workshops)
156	W 2234	Profit and loss account for the month of M. E S workshops at
157	W 2235	Daily materials sheet (workshops)
158	W 2236	Daily labour sheet (workshops)
159	W 2237	Summary of daily labour and materials (workshops).
160	W 2238	Annual return of workshop
161	W-2239	Rent assessment ledger.
162	W-2240	Rent ledger for
163	W 2241	Rent bill for and electrical and water bill for
164	W 2242	Expense ledger
165	W 2243	Register of specimen signatures.
166	W 2244	Register of grants.
167	W 2245	Funds demand
168	W 2246	Imprest Cash Account
169	W 2247	Memorandum of Cash receipts realised by M E S officers
170	W 2248	Schedule of *bills*.
171	W 2249	Job ledger.
172	W 2250	Monthly register of expenditure.
173	W 2251	....
174	W-2252	Register of sanctions.
175	W 2253	Transfer voucher

List of Indian Army Forms (W) used in the Military Engineer Services—contd.

Serial No.	I. A. F. No.	Description of form.
176	W-2254 . .	Transfer entry book.
177	W-2255 . .	Muster roll.
178	W-2256 . .	Casual labour roll.
179	W-2257 . .	Labour report.
180	W-2258 . .	Work-charged establishment bill.
181	W-2259 . .	Register of unpaid wages.
182	W-2260 . .	Hand receipt.
183	W-2261 . .	Measurement book.
184	W-2262 . .	First and final contract bill.
185	W-2263 . .	Running / Final contract bill.
186	W-2264 . .	Contractor's ledger.
187	W-2265 . .	Comparative statement.
188	W-2266 . .	Completion report of major works.
189	W-2267 . .	Minor works ledger.
190	W-2268 . .	Completion report for minor works and repairs.
191	W-2269 . .	Register of barrack damages.
192	W-2270 . .	General charges expense ledger.
193	W-2271 . .	Establishment charges expense ledger.
194	W-2272 . .	Contingent bill register.
195	W-2273 . .	Suspense summary.
196	W-2274 . .	Indent for stores.
197	W-2275 . .	Stores order.
198	W-2276 . .	Register of stores orders.
199	W-2277 . .	Schedule of stores purchases in India.
200	W-2278 . .	Schedule of stores purchases in England.
201	W-2279 . .	Stock register.
202	W-2280 . .	Tally card.
203	W-2281 . .	Sale account.
204	W-2282 . .	Schedule of differences in stock.

List of India Army Forms (W) used in the Military Engineer Services—*concld.*

Serial No.	I. A. F. No.	Description of form
205	W-2283 . .	Schedule of reductions from stock.
206	W 2284 . .	Workshop suspense account.
207	W 2285 . .	Schedule of $\frac{\text{Deposits}}{\text{M. E. S. Advances}}$ suspense.
208	W-2286 . .	Register of interest bearing securities
209	W-2287 . .	Register of revenue.
210	W 2288 .	Occupation register
211	W-2289 .	Register of endowment receipts.
212	W 2290 .	Ledger Account of endowments
213	W 2291 .	Annual Account of Cemetery
214	W-2292 . .	Schedule of $\frac{\text{debits}}{\text{credits}}$ to remittances
215	W 2293 . .	Schedule of $\frac{\text{debits}}{\text{credits}}$ to miscellaneous heads of account
216	W 2294 . .	Classified Abstract of receipts and expenditure
217	W 2295 . .	Monthly account
218	W 2296 . .	Water meter card
219	W 2297 . .	Water meter readers' book
220	W 2298 . .	Return of recoveries (water).
221	W 2299 . .	Water consumers' ledger
222	W 2300	bill for water charges
223	W 2301 .	Report for the month of on electrical installation $\frac{\text{M. E. S. Power Station}}{\text{Private supply}}$
224	W 2302 . .	Report for the month of on water supply $\frac{\text{M. E. S. Pumping Plant}}{\frac{\text{M. E. S. Gravity Supply.}}{\frac{\text{Private or Municipal}}{\text{Supply Coy., etc.}}}}$
225	W 2303 . .	Report for the month of on Ice factory.
226	W 2304 .	Water consumption statement.
227	W 2305 . .	Indent book for stores from installations and Workshops "Material at site" stores.
228	W 2306	Indent on England for stores required by the M. E. S. (Outer and inner sheets)
229	W 2307 . .	Furniture rate list for District

APPENDIX L.

(Referred to in paragraph 6.)

List of Reports and Returns to be rendered by the M. E. S.

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted By	Submitted Through	Submitted To	Remarks.
				Weekly.			
1	Statement showing appropriations made during	I. A. F. W-2172.	Last day of week.	G. E.	C. R. E.	U. A.	M. E. S. Account Code, para. 10 (*c*).
				Monthly.			
2	Extract from Register of Cheques.	M. S.	1st	Accounting officer.	..	U. A.	M. E. S. Account Code, para. 14 (*h*).
3	Copies 'A' of Transfer vouchers with a covering schedule.	I. A. F. W-2253.	1st	Consignor	..	U. A.	M. E. S. Account Code, para. 22 (*g*).
4	Stock Return	I. A. F. W-2194.	1st	Stock-holder	..	U. A.	M. E. S. Account Code, para. 51 (*g*).
5	Statement of stores used.	M. S.	1st	Supdt. or Supervisor in charge of installation.	..	S. D. O. (E. & M.).	M. E. S. Account Code, para. 41 (*a*).
6	Monthly operation return	I. A. F. W-2301, W-2303 & W-2302.	1st	Accounting officer.	G. E.	C. R. E.	M. E. S. Account Code, para. 41 (*c*) (*i*).

7	Transfer Voucher in respect of L and M stores	M S	5th	S D O (E & M)		U A	M L S Account Code para 41 (d)
8	Schedule of rents of hired buildings rent of land rates and taxes and compensation for quarters		5th	S D O (Bk Dept)	C R L	U A	M F S Account Code, para 42 (e)
9	Tools and Plant Return						
10	Information in respect of changes in occupation of buildings etc	I A F W 2194 I A F W 2288	5th 10th	Accounting officer G L		U A U A	M E S Account Code, para 45 (f) M E S Account Code para 63 (a) (ii) (a) & (b)
11	Bills and Treasury Receipts in support of amounts recovered in respect of electricity hire of fans etc	M S	15th	G E, S D O (E & M) Supdt. of Installations		U A	M E S Account Code para 63 (b) (ix)
12	Funds Demand						
13	Furniture Return	I A F W 2245	15th	Accounting officer	G L or C R L	U A	M F S Account Code para 11 (a)
14	Monthly expenditure statement	I A I W 2194	5th	S D O (Bk Dept)		U A	M E S Account Code para 40 (b) (i)
15	Return of recoveries	I A I W 2201 I A F W 2218	Soon after 15th 20th	C R E		C F	M L S Account Code, para 20 (d)
16	Work charged establishment bill			G F S D O (E & M), Supdt of Installations		U A	M L S Account Code, para 63 (b) (ii)
17	Salary and fixed T A bills of officers	I A I W 2208 I A I 130	25th 25th	Accounting officer Officers concerned	G L U A	U A C M A	M E S Account Code para 24 (b) To reach U A on 25th M I S A Account Code ar

List of Reports and Returns to be rendered by the M. E. S.—*contd.*

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted			Remarks.
				By	Through	To	
18	T. A. claims of Engineering Establishment, Bk. Dept., Lower Subordinates, Clerical, Artificer. Drawing, petty and menial establishments.	I. A. F. T-1715, T-1716 & T-1718.	25th . .	Officers concerned.	U. A. . .	C. M. A. .	M. E. S. Account Code, para. 43 (*c*) & (*d*).
19	Bills for electricity and hire of fans, etc.	I. A. F. W-2217.	25th . .	G. E., S. D. O. (E. & M.), Supdt. of Installations.	..	Private persons.	M. E. S. Account Code, para. 63 (*b*) (*vi*).
20	Completion report of *Minor Works.*	I. A. F. W-2268.	Last day of month.	Accounting officer.	G. E. . .	C. R. E. .	M. E. S. Account Code, para. 37 (*d*).
21	Imprest Account of C. Es.	I. A. F. W-2246.	Do. .	C. E. .	U. A. . .	C. M. A. .	M. E. S. Account Code, para. 44 (*a*).
22	Transfer Vouchers for materials at site.	..	Do. .	Accounting officer	..	U. A. . .	M. E. S. Account Code, para. 54 (*b*).
23	Summaries of work done.	I. A. F. W-2233.	..	Workshop Supdt.	..	U. A. . .	M. E. S. Account Code, para. 58 (*c*) (*ix*). To be submitted by the beginning of the following month for C. R. E.'s information.

	... and loss account	I A F W 2234		Do		U A	
24(a)	Monthly actual strength of permanent civilian personnel of the M E S.	Telegram	Last day of month	Distt. H Qrs	Command H Qrs.	A G in India	M E S Account Code para 58 (c) (x) To be submitted by the beginning of the following month for C R E's information. To reach A G in India by 5th of each month [See item No 530—I A F Z 2000 (Staff Section).]
				QUARTERLY			
25	Seniority list of permanent clerks draftsmen lower subordinates and storekeepers	M S	1st April 1st July 1st October 1st January	C R E	C E	A G in India	
				HALF YEARLY			
26	Stores balances		1st April 1st October	Stock holder		U A	M E S Account Code para 51 (g)
27	Surplus stock lists		1st May 1st November	C R E		C E	
28	Estimate for temporary establishment	I A F W 1790	23rd Feb 26th Aug	C R E C E		C E A G in India	M E S Account Code para 49 (d)
29							
				YEARLY			
30	Schedule of rates		1st Jan	C R E	C E	E in C	
31	Programme of following year's work in Workshops		1st March	Workshop Supdt		C R E	M E S Account Code para 58 (c) (i)

List of Reports and Returns to be rendered by the M. E. S.—*contd.*

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted By	Submitted Through	Submitted To	Remarks.
32	Furniture rate list for District.	I. A. F. W-2307.	1st July	C. R. E.	C. E	E.-in-C.	Regns. for the M. E. S., para. 191 (*q*).
33	Annual operation returns:—						
	(i) Annual return of electrical installation.	I. A. F. W-1785.	1st July	Accounting officer.	G. E., U. A. & C. R. E.	C. E.	M. E. S. Account Code, para. 41 (*c*) (*ii*). After close of the year.
	(ii) Annual return of pumping station and water supply.	I. A. F. W-1803.					
	(iii) Annual return of M. E. S. ice plant.	I. A. F. W-1824.					
34	Annual operation return of Workshops.	I. A. F. W-2238.	1st July	Workshop Supdt.	G. E.	C. R. E.	C. R. E. will send one copy each to the C. E. and E.-in-C. as soon after 1st July as possible through C. M. A., *vide* M. E. S. Account Code, para. 58 (*h*), and Regns. for the M. E. S., para. 82 (*q*).
35	Annual comparative statements for—						
	(i) electrical installations.	..	..	..	..	..	
	(ii) pumping installations and water supply.	Special	..	C. E.	..	E.-in-C.	
	(iii) ice factories	..	..	..	..	..	
	(iv) workshops	..	..	..	..	..	

36	History sheets		1st June	F in C		G of I	
37	Annual schedule of coal and coke requirements for M E S purposes	M S	1st May	C R E	C F	E in C	
38	Transfer vouchers showing total value of unused materials borne on materials at site at end of March		5th April	S D O (F & M)		U A	M E S Account Code, para 41 (f)
39	Annual furniture return	I A F W 2219	31st May	S D O (Bk Dept.)		C R E	M E S Account Code para 40 (b) (iii)
40	Annual Furniture distribution return	I A F W 1814	Do	Do		Do	M E S Account Code, para 40 (b) (iv)
41	Statement of expenditure on — (i) Periodical and petty repairs (b) Renewals exclusive of any expenditure chargeable to capital for qrs for which C and R Accounts are maintained		1st June at latest	C R E		U A	M E S Account Code para 38 (l)
42	Completion report of manufactures			Accounting officer		U A	M E S Account Code, para 57 (g) After close of financial year
43	Stores receipt and issue voucher files			Stock holder		U A	M E S Account Code, para 51 (d) Three months after the close of the previous financial year
44	Annual return of public military buildings in M E S Districts		As soon after 1st July as possible	C R E		F in C & Q M G in India	

List of Reports and Returns to be rendered by the M. E. S.—*contd.*

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted By	Submitted Through	Submitted To	Remarks.
45	Annual return of public civil buildings in charge of the M. E. S.	..	As soon after 1st July as possible.	C. R. E. .	..	E.-in-C. & Q. M. G. in India.	
46	Annual interchange of Cantonment plans.	..	1st August .	C. R. E. .	..	Do. .	Regns. for the M. E. S., para. 64 (*d*).
47	Schedule of demands for 41.—Civil Works.	I. A. F. W-1775.	20th August	C. R. E. .	C. E. . .	E.-in-C.	
48	Application for re-grant of lapsed expenditure under 41.—Civil Works, Central.	..	As soon as possible after 15th May of each year.	C. R. E. .	Do. .	Do.	
49	Capital and Revenue Accounts of buildings.	..	20th June .	C. R. E. .	C. M. A. .	M. A. G.	
50	General abstract for measurement for periodical repairs to be carried out during the year 19 to the at	I. A. F. W-1789.	25th March .	G. E. . .	..	C. R. E.	
51	Estimate for works or repairs.	I. A. F. W-1793.	1st April .	G. E. .	..	C. R. E.	
52	Estimate for renting buildings for divine service.	..	1st week of April.	G. E. .	C. R. E. .	C. E.	

53	Indent on England for stores required by the M E S	I A F W 2306	15th May	C R. E.	C E	E in C	
54	Annual bulk indents of stores for ensuing financial years requirements	M S	15th Dec	C E . .		C C S I S D	*Vide* para. 78 (*b*) of T I, Vol III
55	Annual confidential report on lower subordinates M E S.	I A F W 1784	1st April .	G E	C R E	C E	See item No 625 of I A F Z 2000 (Staff Section) as amended by A. I (I) No 848 of 192 (items 55 to 57)
55A	Annual confidential report on S D Os of the M E S and W Os and N C Os of the Barrack Dept	I A F W 1784	1st April .	C. R E	C E.	A G in India	
56	Annual confidential report on store keepers M E S	I A F W 1784 A	1st April	G E	C R E	C E	
57	Annual confidential report on clerks M E S	I A F W 1785 A	1st April	G E & C P L	C R E	C E	
58	Annual confidential report on draftsmen M E S	I A F W 1785 B	1st April	Do	*Do*	C L	
59	Annual confidential report on Departmental commissioned officers including the Barrack Department and civilian Assistant Engineers of the M E S	I A F W 1786	1st April	C R E	C E .	A G in India	

List of Reports and Returns to be rendered by the M. E. S.—*contd.*

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted By	Submitted Through	Submitted To	Remarks.
60	Confidential report on regular R. E. and R. E. (I. A.) officers serving in the M. E. S.	Army Form B 194.	1st April	G. E. / Bdge Comdr. ; C. R. E. / Distt. Comdr.	C. E. / G. O. C.-in-C.	M. S., / A. H. Q.	M. S. Circular Memo. No. 8 of November 1924.
61	Inspection report on G. E. / C. R. E. offices by C. R. E. / C. E.	I. A. F. W-1778.	On completion of inspection.	C. R. E. / C. E.	..	C. E. / E.-in-C.	
62	Statement of roads within and outside Cantonment limits, constructed and maintained from M. E. S. funds.	I. A. F. W-1783.	10th July	C. R. E.	C. E.	E.-in-C.	
63	Statement showing proposed additions to or reductions in the grants for major works—civil for the year 19 -19	I. A. F. W-1809.	12th October.	C. R. E.	C. E.	E.-in-C.	
64	Administration report, M. E. S.	M. S.	15th June	C. R. E.	C. E.	E.-in-C.	

64A	Schedule of demands for major works under 50—M E S	M S	1st October	F in C		Q M G India	
64B	Schedule of demands under 48—Army (Ordnance Factories)	Do	Do	Do		M G S	
64C	Schedule of demands under 48—Army (R A I)	Do	Do	Do		A O C	
65	Leave return of officers of the M I S	Do	1st July	C R E	C F	A G in India	
66	Annual forecast of expenditure on stores to be ordered from England for Military Engineer Services	Do	10th June	C R E	C E	L in C	
				OCCASIONAL.			
67	Supplementary funds demand			Accounting officer	G F or C R E & U A	C M A	Whenever required vide para 11 (b) of M L S Account Code
68	Memo of cash receipts	I A F W 2247		Imprest holder		U A	At once as cash is received vide para 12 (c) of M F S Account Code
69	Intimations of sanctions	I A I W 1808		G L	C R F	All concerned	As these are accorded vide para 21 (b) of M L S Account Code and para 24 (a) of Regulations for the M E S
70	Acceptance of tenders without a public call			C R E		C L & C M A	As necessary vide para 29 of M F S Account Code
71	Intimations of appointments promotions postings and leave etc of officers and establishment			Sanctioning authority or C R E		U A	As necessary vide para 43 (h) of M I S Account Code

List of Reports and Returns to be rendered by the M. E. S.—*concld.*

Serial No.	Description of Return.	No. of form.	Date of submission.	Submitted			Remarks.
				By	Through	To	
72	Imprest Accounts .	I. A. F. W-2246.	10th, 20th and 30th of the month.	Imprest-holder.	..	U. A. . .	*Vide* para. 12 (*c*) of M. E. S. Account Code.
73	Completion report of major works.	I. A. F. W-2266.	..	Accounting officer.	G. E. . .	C. R. E. .	*Vide* para. 36 (*d*) of the M. E. S. Account Code.
74	Indent on England for stores required by the M. E. S. (Supplementary).	I. A. F. W-2306.	As required .	C. R. E. .	C. E. . .	E.-in-C.	
75	Casualty return (Subordinates).	I. A. F. W-1805.	..	G. E. . .	C. R. E. .	C. E.	
76	Casualty reports (officers).	A. F. B-151.	As required .	C. R. E. / C. E.	..	A. G. in India.	

APPENDIX M.

(*Referred to in para 24*)

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(*Vide* para 24 and Government of India Home Department Resolutions Nos 713—734, dated 2nd June 1913, as amended by Resolution No F. 1221 Judl., dated 28th November 1922 These powers are subject to the rules laid down in the "Regulations for the M E S or Pay and Allowance Regulations)

B—I.

1 All instruments relating to purchase, supply and conveyance or carriage of materials, stores, machinery, etc 2 All instruments relating to the execution of works of all kinds connected with *buildings, bridges, roads, canals, tanks,* reservoirs, docks, and harbours, and embankments, and also instruments relating to the construction of waterworks, sewage works, and the erection of machinery 3 Security bonds for the due performance *and completion of works* 4 Security bonds for the due performance of their duties by Government servants whom the officers specified have powers to appoint 5 Leases for grazing cattle on canal banks or roadsides, for fishing in a canal, for the cultivation *of land, leases of water for irri*gation and other purposes, and leases of water power, and instruments relating to the sale of grass trees or other produce on roadsides or in plantations 6 Leases of houses land or other immovable property, provided that the rent reserved shall not exceed Rs 5 000 a month (Other than leases of houses appropriated by Government under the provisions of the Cantonments (House Accommodation) Act 1923) 7 All instruments connected with the reconveyance of property given as security 8 Instruments connected with the collection or farming of tolls at bridges or ferries or other means of communication provided by the local Government 9 Agreement for the recovery of fines on account of drift wood or other timber passing into a canal 10 Agreements with temporary establishments	By the Engineer in Chief, Chief Engineers of Commands, Commanding Royal Engineers Garrison Engi*neers, and (in the* case of deeds, contracts or other instruments relating to such Scheme) the Chief Engineer of the Board of Control of the Military Lands *Scheme, Bombay*
11 Agreements entered into in India with civilian mechanics and others for a specified period of service in the Military Engineer Services	By the Engineer in Chief.

12. All deeds and instruments relating to *any matters other than those specified in* heads 1 to 11.	By a Secretary to the Government of India or a Secretary to a local Government.

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X. Agreements with clerks, draughtsmen, accountants, cashiers and storekeepers whom the officer is empowered to appoint.	By any commissioned military officer.

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L. In the case of all Imperial Departments contracts and other instruments relating to house building advances and advances for the purchase of motor cars.	By Heads of Imperial Depts. other than the Army Department in respect of which the procedure prescribed in A. R. I. Volume III. shall be observed.

INDEX TO PARAS

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Page

I

Q

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GOVERNMENT OF INDIA PRESS
8, HASTINGS STREET